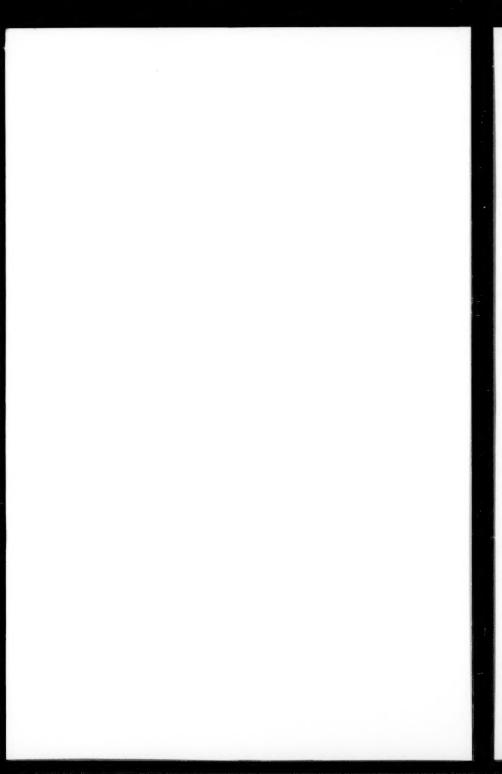
ASCE ANNUAL COMBINED INDEX

1994



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The ASCE Annual Combined Index-1994 provides a guide to the material appearing in publications of the American Society of Civil Engineers published during 1994. This includes papers and technical notes from ASCE technical and professional journals, feature and news articles from Civil Engineering-ASCE, Manuals and Reports on Engineering Practice, books and conference papers appearing in conference publications. In the subject index, the user will find all articles and papers dealing with specific subject areas listed under one or more appropriate subject headings suggested by the content and application of the paper. The author index contains entries indexed under the names of editors, authors, co-authors, discussers, and committees or task forces preparing reports. Also in the author index, entries are supplemented with information concerning discussions, errata, and closures, if any. (If there is more than one author for the original paper, this supplementary information is given with the entry for the primary author.) To find what discussion, if any, there has been for a paper or article located in the subject index, the user should look under the entry for the first named author of the paper. When a paper from a prior year is discussed, entries for the original paper are repeated in this Index.

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FOREWORD

The 1994 ASCE Annual Combined Index provides a guide to material appearing in publications of the American Society of Civil Engineers published during 1994. This includes papers and technical notes from ASCE technical and professional journals, feature and news articles from Civil Engineering-ASCE, Manuals and Reports on Engineering Practice, books, and conference papers appearing in conference publications.

In the subject index, the user will find all articles and papers dealing with specific subject areas listed under one or more appropriate subject headings suggested by the content and application of the paper.

The author index contains entries indexed under the names of editors, authors, co- authors, discussers, and committees or task forces preparing reports. Also in the author index, entries are supplemented with information concerning discussions, errata, and closures, if any. (If there is more than one author for the original paper, this supplementary information is given with the entry for the primary author.) To find what discussion, if any, there has been for a paper or article located in the subject index, the user should look under the entry for the first named author of the paper. When a paper from a prior year is discussed, entries for the original paper are repeated in this Index.

See next page for sample entries and explanations.

For conference papers appearing in special publications

¹Construction Operations on the OUTPOST Platform in Orbit, ²Thomas C. Taylor, ³(Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), 4p423-432.

1. Title of paper. 2. Author(s). 3. Title, editor and year of publication of book. 4. Pagination.

For special publication (books)

¹Engineering, Construction, and Operations in Space IV, 2vols, 2Rodney G. Galloway, ed. and Stanley Lokaj, ed., 31994, 40-87262-937-6, 51560pp.

1. Title of book. 2. Author, editor, or corporate author. 3. Year of publication. 4. ISBN 5. Pagination.

Sample author index entry showing notes for discussion

Adkins, Dan F.

²Mathematics of Concrete Scaling, with Gary P. Merkley and Gertrudys Brito, ³MT ⁴May 93, 5p280-288

6disc: Bryant Mather, MT Nov. 94, p614-615 clo: MT Nov. 94, p615-616

1. Author's name. 2. Title of paper. 3. Journal code. 4. month and year of journal. 5. Pagination. 6. Discussion note including author(s) of discussion, journal issue, and pagination.

Sample subject index entries

For journal papers, technical notes, and magazine articles

¹Critical Rainfall Duration for Maximum Discharge from Overland Plane, ²Charng-Ning Chen and Tommy S. W. Wong, 3HY ⁴Sept. 93, ⁵p1040-1045.

1. Title of paper. 2. Author(s). 3. Journal code. 4. Month and year of publication. 5. Pagination.

Abbreviations used in this index

disc-discussion

err-errata

clo-closure

ltr-letter to the editor which does not refer to a previously published article

Journal Codes

AS Journal of Aerospace Engineering

CE Civil Engineering-ASCE

CC Computing Review Newsletter

CF Journal of Performance of Constructed Facilities

CO Journal of Construction Engineering and Management

CP Journal of Computing in Civil Engineering

CR Journal of Cold Regions Engineering EE Journal of Environmental Engineering

El Journal of Professional Issues in Engineering **Education and Practice**

EM Journal of Engineering Mechanics

ET Emerging Technology

EY Journal or Energy Engineering

GT Journal of Geotechnical Engineering

HY Journal of Hydraulic Engineering

IR Journal of Irrigation and Drainage Engineering

ME Journal of Management in Engineering

MT Journal of Materials in Civil Engineering

NE ASCE News

ST Journal of Structural Engineering

SU Journal of Surveying Engineering

TE Journal of Transportation Engineering

UP Journal of Urban Planning and Development

WP Worldwide Projects

WR Journal of Water Resources Planning and Management

WW Journal of Waterway, Port, Coastal and Ocean Engineering

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Optimal Design of Base-Isolated Structures with Dynamic Absorbers, S. C. Sinha and Guangning Li, EM Feb. 94, p221-231.

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J. McCarter, MT Feb. 93, p130-136.

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Calibration of Poorly Identifiable Systems: Application to Activated Sludge Model, Marcos von Sperling, EE May/June 94, p625-644.

Comprehensive Fate Model for Metals in Municipal Wastewater Treatment, Wayne J. Parker, Hugh D. Monteith, John P. Bell, Henryk Melcer and P. Mac Berthouex, EE Sept./Oct. 94, p1266-1283.

Bettindex, is experient.

Fflect of Sludge Blend on Dewatering Characteristics, Ali Davarinejad and Nikolay Voutchkov, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p273-280.

Effects of Gravity Currents in Circular Secondary Clarifiers, C. van Marle and C. Kranenburg, EE July/Aug. 94, p943-960.

Estimating Toxicity of Organic Chemicals to Activated-Sludge Microorganisms, B. Sun, N. Nirmalakhandan, E. Hall, X. H. Wang, J. Prakash and R. Maynes, EE Nov./ Dec. 94, p1459-1469.

Improvement of Flow in Final Settling Tanks, Ulrich Bretscher, Peter Krebs and Willi H. Hager, EE May/June

92, p307-321.

KBES for Process Control of Nitrification in Activated Sludge Process, Naci H. Ozgur and Michael K. Stenstrom, EE Jan./Feb. 94, p87-107.
Numerical Approach to Clarifier Operation According to

Flux Theory, Bruce J. Alderman, Thomas L. Theis and Anthony G. Collins, EE May/June 94, p670-676.

Off-Gas Recycle for VOC Emission Control: Conceptual Model, Yerachmiel Argaman and Jack L. Musterman,

EE May/June 94, p573-587.

Sludge Hopper Design for Activated Sludge Clarifiers, O. E. Albertson, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p217-224.

Activated sludge process

Actionated ORP Control for Aerobic/Anoxic Cycling in Oxidation Ditch Treatment, Thomas E. Coleman, H. David Stensel, Darrel Fleischman and W. Brent Denham, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p444-

Biodegradation of 2,4-Dinitrotoluene in a Two Stage System, S. L. VanderLoop, M. T. Suidan, M. A. Moteleb and S. W. Maloney, (Critical Issues in Water and Waste-

water Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p710-717.

Denitrification Inhibition by High Nitrate Wastes, W. Vey-dovec, J. Silverstein, N. E. Cook, Jr., L. A. Figueroa, R. Hund and G. D. Lehmkuhl, (*Critical Issues in Water and* Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p415-422.

Development of a Model for the ABF/AS Process, Julian

Sandino and Ross E. McKinney, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p686-693.

Effect of Acid Orange 7 on Nitrification Process, Yongjie He and Paul L. Bishop, EE Jan./Feb. 94, p108-121.

Evaluating Activated Sludge Secondary Clarifier Performance: A Protocol, E. J. Wahlberg, M. Augustus, D. T. Chapman, C. Chen, J. K. Esler, T. M. Keinath, D. S. Parker, R. J. Tekippe and T. E. Wilson, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p209-216.

Active Control of Axial Forces in Beam String Space Frames, Shiro Kato, Shoji Nakazawa, Yasuo Matsue and Tatsuo Yamashita, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p664-673.

Continuous Pulse Control of Structures with Material Nonlinearity, Chris P. Pantelides and Paul A. Nelson, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994),

p300-309.

Digital Signal Processing Techniques for Active Structural Control, B. F. Spencer, Jr., P. Quast, S. J. Dyke and M. K. Sain, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p327-336.

Frequency Domain Optimal Control Strategies for Aseismic Protection, B. F. Spencer, Jr., J. Suhardjo and M. K. Sain, EM Jan. 94, p135-158.

Generalized Optimal Active Control with Embedded and Half-space Soil-Structure Interaction, F. Y. Cheng, S. Suthiwong and P. Tian, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p337-346.

Hybrid Structural Control for Seismic Safety, Michael A. Riley, Haluk Aktan, Satish Nagarajaiah and Andrei M. Reinhorn, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p307-316.

Innovations in Major Suspension Bridge Design, Klaus H. Ostenfeld, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p772-778.

Methods to Control Wind-Induced Building Motions, Ahsan Kareem, (Structures Congress XII, N. C. Baker, ed.

and Barry J. Loodno, ed., 1994), p654-659.

Modal Predictive Control of Structures. I: Formulation, F. López-Almansa, R. Andrade, J. Rodellar and A. M. Reinhorn, EM Aug. 94, p1743-1760.

Modal Predictive Control of Structures. II: Implementation, F. López-Almansa, R. Andrade, J. Rodellar and A. M. Reinhorn, EM Aug. 94, p1761-1772.

Multiobjective Optimization of Actively Controlled Struc-

tures, S. S. Rao, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p276-285.

Optimal Configuration of Active-Control Mechanisms, Mohamed Abdel-Mooty and John Roorda, EM Mar. 94, p535-556.

Robust Active Control of Cable-Stayed Bridge Subjected to Earthquake Ground Motion, Mario E. Magaña, Alan G. Hernried and Dietmar Scheer, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p317-326.

Seismic Response Control of Bridges by Variable Dampers, Kazuhiko Kawashima and Shigeki Unjoh, ST

Sept. 94, p2583-2601.

Single-Degree-of-Freedom Nonlinear Homogeneous Sys-tems, José A. Inaudi, George Leitmann and James M. Kelly, EM July 94, p1543-1562.

Stability Analysis of Optimal Active Control Systems with Time-Delay and Other Influence Parameters, Franklin Y. Cheng and Peter Tian, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p286-295.

Stability of Active-Tendon Structural Control with Time Delay, L. Zhang, C. Y. Yang, M. J. Chajes and A. H-D. Cheng, EM May 93, p1017-1024.

Active structures

Current State of Development and Future Trends in Employment of Air-Supported Roofs in Long-Span Applications, Kris P. Hamilton, David M. Campbell and Paul A. Gossen, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p612-621.

Adaptive systems

- Adaptability of Translation-Grid Shells, J. G. Oliva Salinas, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p133-141.
- Adaptive Forecasting of Hourly Municipal Water Consumption, Chatree Homwongs. Tep Sastri and Joseph W. Foster, III, WR Nov./Dec. 94, p888-905.
- Adaptive Instructor Model for an Engineering ITS, Nelson C. Baker and Chaisak Srisethanil, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1059-1066.
- Feasibility Study of Adaptive Control of Structures Under Seismic Excitation, R. A. Burdisso, L. E. Suarez and C. R. Fuller, EM Mar. 94, p580-592.
- Quantification of Cost Uncertainties Using Neural Network Technique, Awad S. Hanna and Li-Chung Chao, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p41-46.

Adhesive bonding

- Development of Hardwood Glulam Timber Bridge Standards, H. B. Manbeck, J. J. Janowiak, P. R. Blankenhorn and P. Labooksy, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1304-1309.
- Moment-Rotation Behavior of Pultruded Beam-to-Column Connections, J. T. Mottram and A. J. Bass, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p423-428.
- Surface Preparation of Steel for Adhesive Bonding in Rehabilitation Applications, Steven H. McKnight, Pierre E. Bourban, John W. Gillespie, Jr. and Vistasp M. Karbhari, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1148-1155.
- Usage of Adhesives and Composites in Highway Structures, Hani G. Melhem and John R. Schlup, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p983-990.

Admixtures

- Admixture Applications in Large Concrete Pours, Augustine Uchechukwu Elinwa, MT Aug. 94, p352-356.
- Admixtures May Add Months to Construction Schedules, ET Dec. 94/Jan. 95, p1,4.
- Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994, 0-7844-0034-2, 621pp.
- Advances in Chemical Admixtures for Concrete, Mario Collepardi, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p257-291.
- Cement Manufacture and Use, Paul W. Brown, ed., 1994, 0-7844-0048-2, 324pp.
- Characteristics of Silica-Fume Concrete, Safwan A. Khedr and Mohamed N. Abou Zaid, MT Aug. 94, p357-375.
- Extended Set Control of Concrete, Emmanuel K. Attiogbe and Hamid Farzam, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p137-146.
- Guide for the Design of Prestressed Concrete Poles, William Y. Ford, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p591-596.
- High Strength Shotcrete and Concrete on the SSC Project, Leon A. Berdugo, Prabir Das and C. J. Roth, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p761-766.
- Knowledge-Based Expert System for Concrete Mix Design, Yong Bai and Serji N. Amirkhanian, CO June 94, p357-373.
- Metakaolin Increases Strength and Lowers Permeability of High Performance Concrete, K. Gruber, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p613.
- Mineral Admixtures for Concrete An Overview of Recent Developments, P. K. Mehta, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p243-256.
- Mineral Admixtures in Cements for General Use and Special Purposes, Harold Roper, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p.236-242.

- Mineral Admixtures: Reactions, Micro-Structure and Macro-Properties, Jan Bijen and Hans Pietersen, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p292-328.
- Optimization of Curing of Silica Fume Concrete, Mohammad Shamim Khan and Michael E. Ayers, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p820-827.
- Silica Fume (Microsilica) Fundamentals for Use in Concrete, Mark D. Luther and Philip A. Smith, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p75-106.
- Use of Recycled Tire Rubbers in Concrete, Timothy D. Biel and Hosin Lee, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p351-358.
- Use of Waste Rubber in Light-Duty Concrete Pavements, Richard R. Schimizze, James K. Nelson, Serji N. Amirkhanian and John A. Murden, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p367-374.
- Utilization of Used Foundry Sand in Concrete, Tarun R. Naik, Viral M. Patel, Dhaval M. Parikh and Mathew P. Tharaniyil, MT May 94, p254-263.

Adsorbents

- Adsorberns

 Evaluation of Fe oxide-coated GAC for removal and recovery of Cu(II) from water, T. C. Wang, K. P. Chandra
 and P. R. Anderson, (Critical Issues in Water and
 Wastewater Treatment, Joseph N. Ryan, ed. and Mare
 Edwards, ed., 1994), p225-232.
- Recovery and Recycling of Copper from Wastewater using Iron Coated GAC, Kotha P. Reddy, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p392-399.

Adsorption

- Activated Carbon as a Catalyst for Polymerization of Phenolic Compounds, Jacob A. Bourdeau and Radisav D. Vidic, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p756-763.
- Adsorption of 1,1,2-Trichloroethane from River Water, Roberto M. Narbaitz and Andrew Benedek, EE Nov. J. Dec. 94, p1400-1415.
- Composite Sorption of Pure Vapors on Polyolefins, Carbon, and Minerals, Benito J. Mariñas and Ren-An Li, EE Sept./Oct. 94, p1207-1229.
- Detailed Characterization and Preliminary Adsorption Model for Materials for an Intermediate-Scale Reactive-Transport Experiment, David B. Ward, Charles R. Bryan and Malcolm D. Siegel, (High Level Radioactive Waste Management, High Level Radioactive Waste Program
- Committee, 1994), P2048-2062.

 Effects of Molecular Oxygen and pH on the Adsorption of Aniline to Activated Carbon, Peter Fox and Kamalesh Pinisetti, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed.,
- 1994), p617-623.
 Prediction and Verification of Atrazine Adsorption by PAC, Shaoying Qi, Samer S. Adham, Vernon L. Snoeyink and Ben W. Lykins, Jr., EE Jan/Feb. 94, p202-218.
- ink and Ben W. Lykins, Jr., EE Jan./Feb. 94, p202-218. Treatment of Metal Industrial Wastewater by Fly Ash and Cement Fixation, C. H. Weng and C. P. Huang, EE Nov./Dec. 94, p1470-1487.
- New Jersey Systems in Selecting Equilibrium Isotherms of Organic Compound Adsorption on Activated Carbon, Imad A. Basheer and Shrinath Kotdawala, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994).
- p640-643.
 Use of Granular Activated Carbon Columns for Lead Removal, B. E. Reed and S. Arunachalam, EE Mar/Apr. 94, p416-436.
- Vapor Adsorption of Trichloroethylene on Quartz Sands of Varying Grain Size, David K. Kreamer, Karol J. Oja, S. M. Steinberg and Hugh Phillips, EE Mar/Apr. 94, p348-358.

Advection

Adaptive Numerical Methods for Transport Dominated Processes, Alfio Quarteroni, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p114-126. Conservative Characteristics-Based Schemes for Mass Transport, C. W. Li and T. S. Yu, HY Sept. 94, p1089-

Different Methods to Compute Pollutant Dispersion Around Buildings, R. Panneer Selvam and Alan H.

Huber, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p92-98.
High-Resolution Upwind Schemes for Solving Mass Transport Equation, Jihn-Sung Lai, Hsieh Wen Shen and Dihua Zhao, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p497-

Numerical Studies of Radionuclide Migration in Layered Porous Media, Robert L. Buckley, Sudarshan K. Loyalka and M. M. R. Williams, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1842-1847.

Aeration

Chicago's Waterfalls, Rita Robison, CE July 94, p36-39.

Design and Testing of Two Ice-Preserving Winter Lake Aeration Systems, Christopher R. Ellis and Heinz G. '94, Stefan, (Hydraulic Engineering George Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1326-1330.

Developing Air Concentration and Velocity Probes for Measuring Highly-Aerated, High-Velocity Flow, Kath-leen H. Frizell, David G. Ehler and Brent W. Mefford, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p268-277.

Measuring Air Concentration in Flowing Air-Water Mix-tures, Boualem Hadjerioua, Tony A. Rizk, Emmett M. Laursen and Margaret S. Petersen, (Fundamentals and Advancements in Hydraulic Measurements and Experi-

mentation, Clifford A. Pugh, ed., 1994), p289-295. Modeling Full-Scale Diffused Aeration Systems, Terry L. Johnson and Ross E. McKinney, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p702-709.

Oxygen Transfer in Bubbly Turbulent Shear Flow, Kyung Soo Jun and Subhash C. Jain, HY Jan. 93, p21-36. Self-Aerated Flows on Chutes and Spillways, H. Chanson,

HY Feb. 93, p220-243.

Testing Turbine Aeration for Dissolved Oxygen Enhancement, Tony L. Wahl, Jerry Miller and Doug Young, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p425-434.

Vortex Convection Produced by V-Shaped Dihedral Ob-struction, Takashi Asaeda, Pham Hong Son and Steven

Armfield, HY Nov. 94, p1274-1291.

Water Quality Enhancement Technology for River-Reservoir Systems, John S. Gulliver and Steven C. Wilhelms, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1331-1340.

Wave Impacts on Sea Walls and Breakwaters, A. R. Crawford, M. J. Walkden, P. A. D. Bird, G. N. Bullock, P. J. Hewson and J. Griffiths, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p656-670.

Aerators

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Automated ORP Control for Aerobic/Anoxic Cycling in Oxidation Ditch Treatment, Thomas E. Coleman, H. David Stensel, Darrel Fleischman and W. Brent Denham, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p444-

The Performance of Unconfined Hollow Fiber Membranes as Pipe Flow and Mixed Flow Aerators, Drew W. Johnson and Michael J. Semmens, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and

Mare Edwards, ed., 1994), p106-113.

Aerobic treatment Automated ORP Control for Aerobic/Anoxic Cycling in Oxidation Ditch Treatment, Thomas E. Coleman, H. David Stensel, Darrel Fleischman and W. Brent Denham, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p444Biotransformation of Pesticides in Simulated Groundwater Columns, Gregory G. Wilber and Stuart R. Garrett, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p368-

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Multi-mode Aerodynamic Analysis of Long-Span Bridges, Nicholas P. Jones, Anurag, Jain and Robert H. Scanlan, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p894-899.

New Airfoil-Design Concept with Improved Aerodynamic Characteristics, Demeter G. Fertis, AS July 94, p328-339

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Aerospace engineering

A Distributed Parameter Model for the Dynamic Analysis of Beam-like Structures with Varied Sectional Proper-ties, Ji Yao Shen, Elias G. Abu-Saba, William M. McGinley, Lonnie Sharpe, Jr. and Lawrence W. Taylor, Jr., (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p110-123

Dynamic Analysis of a High Speed Transport Model by Using a Piecewise Continuous Timoshenko Beam Model, Ji Yao Shen and William M. McGinley, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994),

p27-36.

Dynamics of Laminated Plates with Layer Waviness, Raouf A. Raouf, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p109-115.

Future Launch Systems: The Policy Challenge, Matthew A. Bille, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1452-1461.

The History and Present Status of Microwave Aircraft, William C. Brown, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1482-1491.

Postbuckling Response of Doubly-Curved Shallow Panels Under Complex Loading Conditions, L. Librescu and M. Y. Chang, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p116-126.

A Space Suit for Productive and Safe Extravehicular Activity (EVA), Brand Norman Griffin, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1372-1381.

Viscoplastic Response of Structures for Intense Local Heating, Earl A. Thornton and J. D. Kolenski, AS Jan. 94, p50-71.

Aerospace industry

Allowable Design Loads for Marman Clamp Systems, Robert DiTolla and Michael Ernst, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p217-226.

Large Deformation Theory Using Truncated Rotations, Daniel A. Miller and Anthony N. Palazotto, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p137-146.

Space Commercialization: Problems of Law and Policy, Glenn H. Reynolds, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1462-1470.

Aerospace transport Space Stations Past, Present, and Future, Keegan Kimbrough, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p837-841.

System for Orbital Recovery of Space Shuttle's External Tank, Raul Ferri, AS Jan. 94, p92-103.

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Covering Keeps Issue in Hand (ltr), CE June 94, p36. Evaluation of Shotcrete Efficiency in Sewers Rehabilitation, Youssef Georges Diab, (Infrastructure: New Mate-

rials and Methods of Repair, Kim D. Basham, ed., 1994), p928-935

Relationship of SHRP Binder Test, Frank Fee, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p114-122. Rheological Evaluation of Engineered Asphalt Binders, H.

U. Bahia and N. I. Kamel, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994),

Road-Maintenance Planning Using Genetic Algorithms. II: Analysis, T. F. Fwa, C. Y. Tan and W. T. Chan, TE

Sept./Oct. 94, p710-722. Service Lateral Reconstruction in the Isle of Man, Jeff Wells, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p257-264.

System Impacts of Fuel (Age and Burnup) Selection, Flora Emami, William Bailey and Mark Fleming, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1538-1542.

Aggradation

Width Adjustment: Relative Dominance in Unstable Alluvial Streams, Andrew Simon, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p974-978

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Coordinating the Feasibility of a Dredged Material Separation System Using Hydrocyclones for the Maintenance Dredging Operation at Canaveral Harbor, Florida, Deborah R. Heibel, Mitch A. Granat and Mark Wolff, (*Dredg*ing '94, E. Clark McNair, Jr., ed., 1994), p38-47.

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Characterization of Cement-Aggregate Interfaces by Elec-trical Conductivity Methods, Xie Ping and J. J. Beaudoin, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p15-25.

Compacted High-Gravel-Content Subgrade Materials, William N. Houston, Sandra L. Houston and Kenneth D.

Walsh, TE Mar./Apr. 94, p193-205.

Comparison of Rock Correction Methods for Compaction of Clayey Soils, Sandra L. Houston and Kenneth D. Walsh, GT Apr. 93, p763-778.

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Fly Ash and Alkali-Aggregate Reaction, Michael Thomas, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p362-376.

LADS System, Inc. Thermal Remediation Treatment for Contaminated Sediment, Vladimir Shepsis, Nancy L. Case and Gregory L. Hartman, (Dredging '94, E. Clark

Case and Gregory E. Fattman, (Dreaging 94), E. Clark McNair, Jr., ed., 1994), p66-75. Large-Stone Aggregate-Modified Asphalt Mixes, Murari Man Pradhan and Joseph D. Armijo, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham,

ed., 1994), p627-634. Lightweight Concrete - A Proven Material for Two Millennia, Theodore W. Bremner, Thomas A. Holm and Valentina F. Stepanova, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p37-51

Microstructure of the Paste - Aggregate Interface, Includ-ing the Influence of Mineral Additions, J. P. Ollivier and M. Massat, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994),

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Recent Developments in Physical Testing of Aggregates to Ensure Durable Concrete, C. A. Rogers and S. A. Senior, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p338-361

Resilient Moduli of Granular Materials, Musharraf Zaman, Dar-Hao Chen and Joakim Laguros, TE Nov./Dec. 94,

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Rough Cracks Subjected to Earthquake Loading, Joost

Walraven, ST May 94, p1510-1524.

Short Aggregate Piers Defeat Poor Soils, Nathaniel S. Fox, Evert C. Lawton and Richard L. Handy, CE Dec. 94, p52-55.

Strategy for Beneficial Use of Stoker-Boiler Coal Ash, Christina B. Behr-Andres, Gordon K. Parish and Neil J.

Hutzler, EE Mar./Apr. 94, p401-415.

Utilization of Phosphogypsum-Based Slag Aggregate in Portland Cement and Asphaltic Concrete Mixtures, Paul T. Foxworthy, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p75-

Aggregation

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Effect of Aggregation on Vibrio Cholerae Inactivation,
Robert M. Clark, Eugene W. Rice, Bennett K. Pierce,
Clifford H. Johnson and Kim R. Fox, EE July/Aug. 94, p875-887

Effects of Flocculation on Particle Transport, Wilbert Lick, C. Kirk Ziegler, James Lick and Aruna Joshi, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p172-186. A Nested-Model Approach to Investigate Climate Change,

Lauren E. Hay and George H. Leavesley, (Water Policy and Management: Solving the Problems, Darrell G.

Fontane, ed. and Harry N. Tuvel, ed., 1994), p477-480. Shale Slurry Walls, ET June/July 94, p11. Spatial Disaggregation for Studies of Climatic Hydrologic Sensitivity, Daniel Epstein and Jorge A. Ramirez, HY Dec. 94, p1449-1467.

Aging Effect on Bond Strength in Composite Sections, Yasser M. Hunaiti, MT Nov. 94, p469-473.

Comparative Analysis of Bridge Superstructure Deteriora tion, David Veshosky, Carl R. Beidleman, Gerald W. Buetow and Muge Demir, ST July 94, p2123-2136. Creep and Shrinkage Deflections of RC Beams with Steel

Fibers, Kiang-Hwee Tan, P. Paramasivam and Kah-Chai Tan, MT Nov. 94, p474-494.

Hall, MT NOV. 34, p474-394.

Hydraulic Analysis of an HDPE Water Supply Pipeline,

Yifan Zheng and Adnan M. Alsaffar, (Hydraulics of

Pipelines, Deon T. Fowles, ed. and Douglas H.

Wegener, ed., 1994), p318-328. Long Term Performance of Fiber Reinforced Cements and Concretes, Arnon Bentur, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p223-234.

Maintaining Reliability of Concrete Structures. I: Role of Inspection/Repair, Yasuhiro Mori and Bruce R. Elling-

wood, ST Mar. 94, p824-845.

Maintaining Reliability of Concrete Structures. II: Optimum Inspection/Repair, Yasuhiro Mori and Bruce R. Ellingwood, ST Mar. 94, p846-862.

Preconsolidation versus Aging Behavior of Kaolinite Clay, G. A. Athanasopoulos, GT June 93, p1060-1066

Preliminary U-Series Disequilibrium and Thermolumines-cence Ages of Surficial Deposits and Paleosols Associated with Quaternary Faults, Eastern Yucca Mountain, J. B. Paces, C. M. Menges, B. Wildmann, J. R. Wesling, C. A. Bush, K. Futa, H. T. Millard, P. B. Maat and J. W. Whitney, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p2391-2401. Setup and Relaxation in Glacial Sand, Donald L. York,

Walter G. Brusey, Frank M. Clemente and Stephen K. Law, GT Sept. 94, p1498-1513. Variables Affecting Cyclic Behavior of Reinforcing Steel, J. I. Restrepo-Posada, L. L. Dodd, R. Park and N. Cooke, ST Nov. 94, p3178-3196.

Agitation dredging

Agitation Dredging Environmental Study, Larry M. Stuber and Elizabeth A. Day, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p76-85.

Agitation intensity

Effect of Preagitation on Freeze-Thaw-Conditioned Sludge Dewaterability, P. Aarne Vesilind and Jiann-Long Chen, CR Dec. 94, p113-120.

Agricultural wastes

Optimal Control of Ground-Water Quality Management: Nonlinear Programming Approach, S. Álireza Taghavi, Richard E. Howitt and Miguel A. Mariño, WR Nov./ Dec. 94, p962-982.

Restoring the Everglades, James Best Jackson, Larry Fink and Gary Goforth, CE Mar. 94, p52-55.

Agricultural watersheds

model to describe the fate of agricultural pollutants, A. Pinheiro and B. Caussade, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p170-174.

Seasonal Distributions of Peak Flows From Small Agricultural Watersheds, James V. Bonta and A. Ramachandra

Rao, IR Mar./Apr. 94, p422-439.

Agricultural Infrastructure for Urban Irrigation, D. Heinert, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p339-342.

Agriculture and Soil Conservation, Billy M. Teels, (National Water Resources Regulation: Where is the Envi-ronmental Pendulum Now?, Howard Holme, ed., 1994),

p211-218

Bacterial Density Changes Across Sludge Disposal Facility, Ling Cheng, Bret Buras, D. M. Griffin, Jr. and James

D. Nelson, EE Jan./Feb. 94, p138-153.

Biosphere II - Its Effects on Space Colonization, Chris Cassidy, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p826-832.

Bromide Transport under Sprinkler and Ponded Irrigation, M. Hamdi, D. Durnford and J. Loftis, IR Nov./Dec. 94,

p1086-1097

Development of a Geographical Information System for On Farm Management, Malinda Fowler, Don R. May, Omnia El-Hakim, A. Bennally, A. Johnson, S. Spaulding, Wilson Begay and Timothy K. Gates, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p132-135.

Feasibility of Treating Synthetic Greywater by Culturing Waldmann's Dark Green Lettuce in a Hydroponic System, Ricardo B. Jacquez and Michael Montoya, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1256-1265.

Interfacing GIS and Water Quality Models for Agricultural Areas, Vassilios A. Tsihrintzis, Hector R. Fuentes and Rao K. Gadipudi, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

p252-256.

Modeling of Chemical Inhibition of Nitrification, Robert W. Okey and H. David Stensel, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p297-304.

Monitoring Water Quality and Use in Colorado, Henriette Emond, Jim C. Loftis, Terence Podmore and Forrest Leaf, (Water Policy and Management: Solving the Prob-lems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p343-346.

Non-Point-Source Pollution from Interrill Flow Areas, A. Parr, S. Limback, B. McEnroe and S. Zou, IR Nov./Dec.

94, p1056-1066.

Water Conservation and Delivery Flexibility in the Imperi-al Irrigation District Through Lateral Interceptor Systems, Eduardo A. Latimer, Robert W. Charley, Hunziker, Andrew A. Keller and Doug Welch, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p335-338.

Wetland Loss Rates and Agricultural Drainage, Aaron J. Douglas, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel,

ed., 1994), p545-548.

Air chambers

Development of a Partial Gravity Lunar Airlock, David John Gutierrez, (Engineering, Construction, and Opera-tions in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p227-236.

A New Airlock Approach for Human Exploration, Stephen Capps, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p206-216.

Air conditioning Computer Based Energy Analysis for Mechanical Retrofit of Buildings, Joseph Staib, Matt Syal and David Peters, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1349-1356.

Air entrainment

Air Entrainment and Bubble Behavior in Plunge Pools, Boualem Hadjerioua, Emmett M. Laursen, Margaret S. Petersen and Tony A. Rizk, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p989-993.

Frost Susceptibility of Concrete in Near-Saturated States, B. V. Enüstün, K. S. Soo and K. L. Bergeson, MT May

94, p290-306.

Observations of Water Movement in a Block of Fractured Welded Tuff, Falah Thamir, Edward M. Kwicklis, David Hampson and Steve Anderton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2020-2029.

Plunge-Pool Scour by Inclined Jets, Assem M. Afify and Gilberto E. Urroz, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

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Self-Aerated Flows on Chutes and Spillways, H. Chanson, HY Feb. 93, p220-243.

Velocity of Air-Core Vortices at Hydraulic Intakes, John E. Hite, Jr. and Walter C. Mih, HY Mar. 94, p284-297.

Air-Permeability Measurement for Soil at Low and High Pressure, Shawn A. Rodeck, Bruce A. DeVantier and Braja M. Das, EE Sept./Oct. 94, p1337-1343.

Application of a Needle Probe in Measuring Local Parameters in Air-Water Flow, A. R. Zarrati and J. D. Hardwick, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p296-300.

Effects of Air Compression and Counterflow on Infiltration into Soils, M. E. Grismer, M. N. Orang, V. Clausnitzer

and K. Kinney, IR July/Aug. 94, p.775-795.

Measuring Air Concentration in Flowing Air-Water Mixtures, Boualem Hadjerioua, Tony A. Rizk, Emmett M.
Laursen and Margaret S. Petersen, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p289-295.

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Surprises Uncovered at Jet-Crash Sites, CE Mar. 94, p24.

Air injection

Design Optimization of Coventry Municipal Solid Waste Incinerator, V. Nasserzadeh, J. Swithenbank, C. Schofield, D. W. Scott, A. Loader and A. Leonard, EE

Nov./Dec. 94, p1615-1629.

Quantification of the Mechanisms Controlling the Removal Rate of Volatile Contaminants by Air Sparging, Gretchen L. Hein, Neil J. Hutzler and John S. Gierke, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p556-563.

Atmospheric Transport Prediction Using an Adaptive Finite Element Method, Darrell W. Pepper and Ashley F. Emery, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1946-1952.

Breakout Session 5C: Regional Modeling, Jon Anderson, Richard Burkhart and Gus von Bodungen, (Transporta-tion Planning and Air Quality II, Thomas F. Wholly, ed.,

1994), p158-160.

Critical Loads and Development of Acid Rain Control Options, Hugh Ellis and Michael L. Bowman, EE Mar/Apr. 94, p273-290.

Emission-Cost Trade-offs and Rate Feedback for Electric Utilities, Benjamin F. Hobbs, EY Dec. 94, p103-121.

Emissions, Ambient Concentrations, and Potential Health Hazards of VOCs from Wastewater Treatment, Jin-Sheng Lin and Lynn M. Hildemann, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p580-584.

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Bhatt, Donna Boyson, Sonia Hamel and Clarisse Lula, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p145-146.

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From Smog to Feedstock, CE July 94, p8.

Thermal Regeneration of Spent Lithium Hydroxide, Ventatesh Srinivasan and Bernadette Luna, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1036-

Air pollution laws

Clearing the Air with Japan, Germany, CE Feb. 94, p8.

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Breakout Session 1: Coping with Conformity, Lucy Ed-mundson, Sonia Hamel, Abbe Marner and Michael Replogle, (Transportation Planning and Air Quality II,

Thomas F. Wholly, ed., 1994), p139.

Breakout Session 2A: TCM Requirements - General, Daniel Beagan, Elizabeth Deakin, Christine Kirby and Joseph Pulaski, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p140-141.

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Mark Howard, Craig Leiner, Phil Lorang and John Suhrbier, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p142-144.

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(Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p145-146.

Breakout Session 4C: Public Participation, Brian Ketchum, Marilyn Skolnick and Kathleen Stein Hudson, (Transportation Planning and Air Quality II, Thomas F. Whol-

ly, ed., 1994), p154.

Breakout Session 5A: Emissions Modeling, Alan Goldman, Terry Miller and Guido Schattanek, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p155.

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Zanius, (Plansportation Franting and Air Quanty II, Thomas F. Wholly, ed., 1994), p156-157. Change in Gasoline Constituent Mass Transfer During Soil Venting, Nancy J. Hayden, Thomas C. Voice, Michael D. Annable and Roger B. Wallace, EE Nov/Dec. 94,

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Companies Offer Perks to Cut Commuter Trips, ME July/ Aug. 94, p10-11. Conformity and the New Transportation Covenant, James

M. Shrouds, (Transportation Planning and Air Quality

M. Sincous, Charasportation Francing and Air Quality, II, Thomas F. Wholly, ed., 1994), pl.-18. Contribution of Waterborne Radon to Home Air Quality, Arun K. Deb, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed.,

1994), p662-669. Data Needs for Evolving Motor Vehicle Emission Modeling Approaches, Randall Guensler, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed.,

1994), p167-196.

Emission Impacts of Intelligent Vehicle Highway Systems, Simon Washington, Randall Guensler and Daniel Sperling, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p118-138.

Evaluating ATIS Impacts on Air Quality, H. Al-Deek, R. Wayson and A. E. Radwan, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p95-

Evaluating the Effects of Transportation Control Measures, William R. Loudon and Deborah A. Dagang, (Transpor-tation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p19-43.

Implications of ISTEA and CAAA '90 for Transportation Planning Data Needs, Christopher Fleet and Charles Goodman, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p76-94.

The Role of Transportation Control Measures in Reducing Air Pollution: MPO Views, Andrew J. Reser, David T. Hartgen and Walter E. Martin, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p44-

Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994, 0-87262-914-7, 237pp.

Air quality standards

Breakout Session 1: Coping with Conformity, Lucy Ed-mundson, Sonia Hamel, Abbe Marner and Michael Replogle, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p139.

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Evaluating the Effects of Transportation Control Measures, William R. Loudon and Deborah A. Dagang, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p19-43.

Predicting TCM Responses with Urban Travel - Demand Models, Peter R. Stophes, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p59-75. The Role of Transportation Control Measures in Reducing Air Pollution: MPO Views, Andrew J. Reser, David T.

Hartgen and Walter E. Martin, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p44-58.

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Plate and Frame Membrane Air Stripping, Stephen T. Boswell and David A. Vaccari, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and

Harry N. Tuvel, ed., 1994), p726-729.

Process Selection for Treatment of SOC Contaminated Waters, Bruce I. Dvorak, Desmond F. Lawler and Gerald E. Speitel, Jr., (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p601-608.

Air supported structures

Current State of Development and Future Trends in Em-Ployment of Air-Supported Roofs in Long-Span Appli-cations, Kris P. Hamilton, David M. Campbell and Paul A. Gossen, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p612-621.

History and Development of Fabric Structures, R. E. Shaeffer, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penal-

ba, ed., 1994), p979-989. Study on Structural Characteristics of Air-Inflated Beam Structures, Masaya Kawabata and Kazuo Ishii, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p742-751.

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Application of a Needle Probe in Measuring Local Parameters in Air-Water Flow, A. R. Zarrati and J. D. Hardwick, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed.,

1994), p296-300.

Coupled Lake Erie Air-Sea, Storm Resolving Forecasts and Predictions, the Viento Project, John G. W. Kelley, Chieh-Cheng J. Yen, Keith W. Bedford, Jay S. Hobgood and David J. Schwab, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p202-215.

Estimating Air Conductivity and Porosity from Vadose-Zone Pumping Tests, Joel W. Massmann and Mark Mad-

den, EE Mar./Apr. 94, p313-328.

Influence of Liquid Length Variation in Hydraulic Transients, Enrique Cabrera, José Abreu, Rafael Pérez and

Antonio Vela, HY Dec. 92, p1639-1650.

Measuring Air Concentration in Flowing Air-Water Mix-tures, Boualem Hadjerioua, Tony A. Rizk, Emmett M. Laursen and Margaret S. Petersen, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p289-295.

Airblact

Ground Motions and Air-Blast Effects of Explosive Demolition of Structures, Charles H. Dowding, CO Dec. 94, p838-856.

Safety Assessment of a Chemical Reactor Vessel, A. Wiedermann, A. Longinow and F. Calabrese, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1-6.

Airborne operations

Shoals System Capabilities for Hydrographic Surveying, J. L. Irish, W. J. Lillycrop, L. E. Parson and M. W. Brooks, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p314-321

Aircraft

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Habben, CE July 94, p56-59.

Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993, 0-87262-946-5,

Environment-Friendly Deicing/Anti-Icing Fluid, Len Haslim and John Zuk, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p137-139.

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The History and Present Status of Microwave Aircraft, William C. Brown, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1482-1491.

Lumped Mass Modelling for the Dynamic Analysis of Aircraft Structures, Elias G. Abu-Saba, Ji-Yao Shen and William M. McGilaley. (Dynamic Response and Progress.)

william M. McGinley, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p124-134.

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Load Transfer Determination for Airfield Pavements Using the Falling Weight Deflectometer, Michael I. Hammons and David W. Pittman, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p523-530.

Structural Evaluation of Airfield Rigid Pavements Using Falling Weight Deflectometer, Boming Tang, TE May/

June 93, p467-476.

Airport access California Airports: Ground Access Vehicle Trips, Emis-Cantonia Airpois: Orolin Access Venice 11ps, Emissions and Emission Reduction Strategies, Thomas J. Higgins, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p102-126.

Commercial Vehicle Operations and Automatic Vehicle

Identification Applications at Airports, M. Allen Hoffman and Emily Van Wagner, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p162-173.

Rail Service to Airports, Peter B. Mandle, (Aviation Crossroads: Challenges in a Changing World, William

J. Sproule, ed., 1994), p140-149.
Rail-Air: A Multi-Modal Opportunity in a Changing World, Alastair Duff, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p150-158.

Switzerland: Rail Access to Airports and the Fly-Luggage System, Eugene H. Jud, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p159-161.

Airport construction

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Hong Kong: The US\$10 Billion Dollar Question, Julian Weiss, WP Special issue 94, p31-34.

Recycling Portland Cement Concrete Pavement at the Contractor's Option, Richard R. Reusser, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p86-91.

Roof Space Frame Design of the C.K.S. Airport Passenger Terminal II, Yen-Po Chen and Hung-Tao Chao, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), n57-66

Airport design

Airport Terminal Design Challenges, Daniel J. Feil, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p18-25.

Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994, 0-7844-0029-6, 220pp.

Tensile Structures Highlight New Denver Airport, Horst Berger and Edward M. DePaola, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p957-968.

Airport drainage

Miami International Airport Stormwater NPDES Plan, Armando I. Perez, Jonathan Z. Goldman, Michael F. Schmidt and Edward E. Clark, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p540-547.

Airport runways

Airport Reconstruction/Rehabilitation: A Case Study, Steven B. Cornell, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p516-522.

Jointless Runway on Display in Illinois, CE Feb. 94, p12.

Airport terminals

Airport Terminal Design Challenges, Daniel J. Feil, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p18-25.

liam J. Sproule, ed., 1994), p18-25.
Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994, 0-7844-0029-6, 220pp.

Commercial Vehicle Operations and Automatic Vehicle Identification Applications at Airports, M. Allen Hoffman and Emily Van Wagner, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p162-173.

Cost Considerations in Planning Pier Terminals, E. S. Dada and S. C. Wirasinghe, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994),

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Dulles International Airport Construction Challenges, Christopher P. Hinker, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p26-29.

Passenger-Terminal Simulation Model, José Reynaldo Setti and Bruce G. Hutchinson, TE July/Aug. 94, p517-535.

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Airports

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Airport Infrastructure Bill Passes, NE July 94, p2.

Airport Terminal Design Challenges, Daniel J. Feil, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p18-25.

Airports and Air Quality Issues - the European Perspective, David W. Raper, Roger L. Wayson, William Bowlby and James W. S. Longhurst, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p193-210.

Averaging Time and Maximum Speeds in Hurricanes, Naveen Aerrabotu and Timothy A. Reinhold, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p467-472.

Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994, 0-7844-0029-6, 220pp.

California Airports: Ground Access Vehicle Trips, Emissions and Emission Reduction Strategies, Thomas J. Higgins, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p102-126.

Cost Considerations in Planning Pier Terminals, E. S. Dada and S. C. Wirasinghe, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p183-192.

Denver International Airport Tensile Roof Case Study: The Fabrication and Construction Process, Martin L. Brown, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p969-978.

Dulles International Airport Construction Challenges, Christopher P. Hinker, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p26-29.

The Future of the Past: Historic Preservation at the Metropolitan Washington Airports, H. Henry Ward, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p8-17.

Getting the Project Started, Daniel G. Hacker, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p1-7.

Modified Asphalt Binders - How Do They Compare? Randy C. Ahlrich and Gary L. Anderton, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p64-74.

New Methodology for Modeling Annual-Aircraft Emissions at Airports, B. Gordon Woodmansey and Judith G.

Patterson, TE May/June 94, p339-357.

Nighttime Cement Concrete Pavement Replacement Seatule-Tacoma International Airport, Jo A. Lary and John Rothnie, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p92-101.

Optimal Supply of Parking at Airports, Massoud Javid and Prianka N. Seneviratne, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p174-182.

Optimum Design of Airport Enplaning Curbside Areas, Mahmoud S. Parizi and John P. Braaksma, TE July/Aug. 94, p536-551. Private Cogeneration Plant Flies at JFK Airport, CE Sept.

94, p22.

Rail Service to Airports, Peter B. Mandle, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p140-149.

Rail-Air: A Multi-Modal Opportunity in a Changing World, Alastair Duff, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p150-158.

Rating the Megaprojects, CE Jan. 94, p8.

Recycling Portland Cement Concrete Pavement at the Contractor's Option, Richard R. Reusser, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p86-91.

Rigid Pavement Rehabilitation at the San Marcos Municipal Airport, San Marcos, Texas, Franklin Hines and David Pickett, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p531-538.

Switzerland: Rail Access to Airports and the Fly-Luggage System, Eugene H. Jud, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p159-161.

Alabama

A Colorific Tale: ASCE Birmingham Branch Contest Reaches Epic Proportions, CE Aug. 94, p65-66.

Huntsville Students Triumph in Concrete-Canoe Finals for Second Straight Year, CE Sept. 94, p76.

Start-Ups, CE June 94, p8.

Start-ups, CE Oct. 94, p8.

Alaska

Analyzing Larval Fish Distributions Using Hydrodynamic and Transport Modelling, John Eric Edinger, Edward M. Buchak and Michael D. McGurk, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p536-550.

Global-Climate Change?, ET Aug./Sept. 94, p11.

Alfalfa

Alfalfa Irrigation During Drought, J. C. Guitjens, IR Nov. J Dec. 93, p1092-1098. Dormancy and Nondormancy Alfalfa Yield and Evapotranspiration, J. C. Guitiens and M. T. Goodrich, IR Nov./Dec. 94, p1140-1146.

Nutrient Leaching from Alfalfa Irrigated with Municipal Wastewater, Scott F. Korom and Roland W. Jeppson, EE Sept./Oct. 94, p1067-1081.

Algae

Material Condition of Underwater Fuel and Storage Equip-ment, A. P. Hoskins, J. G. Scott, C. V. Shelton-Davis and G. E. McDannel, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1117-1123.

Evaluation and Management of Non-Point Source Pollu-tants in the Lake Tahoe Watershed, G. Fred Lee and Anne Jones-Lee, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p516-523.

Modeling Ecological Impacts of Destratification, S. Geoffrey Schladow, David P. Hamilton and Murray C. Burling, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1321-1325

Algorithms

Algorithm for Siphon-operated LPD Sewage Manifolds, Dennis L. Kaiser, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p424-

An Artificial Neural Network Approach to Allocating Con-struction Resources, Abdullah M. Alsugair and David Y. Chang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p950-957.

Atmospheric Transport Prediction Using an Adaptive Fitmospheric Transport Prediction Using an Adaptive Fi-nite Element Method, Darrell W. Pepper and Ashley F. Emery, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1946-1952.

Augmented Lagrangian Genetic Algorithm for Structural Optimization, Hojjat Adeli and Nai-Tsang Cheng, AS

Jan. 94, p104-118.

Best Route GIS System, Siripong Malasri and L. Yu Lin, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1123-1130.

A Computational Algorithm for Analysis of Rectangular Footings Under Partial Contact with Soil, P. Rajendran, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p652-659.

Computer-Based Advisors for Environmentally Conscious "Green" Product Design, Antonio Diaz-Calderon, Steven Fenves, James Garrett and Chris Hendrickson, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1497-1504.

Computing Two Dimensional Flood Propagation with a High Resolution Extension of McCormack's Method, F Alcrudo and P. García Navarro, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p3-17.

Conceptual Design Using Evolutive-Cognitive Computing Techniques, Donald E. Grierson, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2183-

Concurrent E-I Algorithm in Structural Dynamics, E. D. Sotelino, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p169-176.

Concurrent Genetic Algorithms for Optimization of Large Structures, Hojjat Adeli and Nai-Tsang Cheng, AS July 94. p276-296.

Creative Design Using a Genetic Algorithm, Mary Lou Maher, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2014-2021.

Data Fusion for an ATIS Operational Test: Description and Computational Issues, Nagui M. Rouphail and Peter Nelson, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1532-1535.

DBID: Analogy-Based DSS for Bidding in Construction, Osama Moselhi, Tarek Hegazy and Paul Fazio, CO Sept.

93, p466-479.

- Demand/Supply Relationship in Transportation Network Design Problems: A Genetic Algorithm Approach, Yihua Xiong and Jerry B. Schneider, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p938-
- DETMOD: A Desktop Estuarine Transport MODel, David G. Kleinschmidt and Bryan R. Pearce, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1032-1038.
- Downstream Control Algorithm for Irrigation Canals, Fubo Liu, Jan Feyen and Jean Berlamont, IR May/June 94, p468-483.
- Effective Unsaturated Hydraulic Property Determination with the Renormalization Group Approach: Methodology, Sitakanta Mohanty and Amvrossios C. Bagtzoglou, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2660-2668.

Error Evaluation of Three Random-Field Generators, Gordon A. Fenton, EM Dec. 94, p2478-2497.

Evolutionary Methods for Synthesis of Truss Topology, Fang Zhao, Sushil J. Louis and Mihaly Lenart, (Comput ing in Civil Engineering, Khalil Khozeimeh, ed., 1994), n1816-1823.

Exploration as a Basis of Creative Engineering Design, John S. Gero, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p1824-1831.

Finite Element Algorithms for Modelling Flood Propaga-tion, J. -M. Hervouet and J. -M. Janin, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p102-113.

Finite-Element Calculations on Alliant FX/80, Brian C. Watson and Manohar P. Kamat, AS Oct. 94, p446-462.

Generalized Optimal Active Control with Embedded and Half-space Soil-Structure Interaction, F. Y. Cheng, S. Suthiwong and P. Tian, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p337-346.

Genetic Algorithms Compared to Other Techniques for Pipe Optimization, Angus R. Simpson, Graeme C. Dan-dy and Laurence J. Murphy, WR July/Aug. 94, p423-

Genetic Algorithms in Discrete Optimization of Steel Truss Roofs, Vlasis K. Koumousis and Panos G. Georgiou, CP July 94, p309-325.

Genetic Algorithms in Groundwater Management, L. Srinivasa Reddy, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

Geostatistics for Fracture Characterization, R. Mohan Srivastava and Bruce M. Davis, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2131-2138.

GIS-Based Channel Extraction and Smoothing Algorithm for Distributed Hydrologic Modeling, Fred L. Ogden, Bahram Saghafian and Witold F. Krajewski, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p237-241.

Global Network Optimization for Pavement Management, Kelvin C. P. Wang and John Zaniewski, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p474-482

High-Resolution Upwind Schemes for Solving Mass Transport Equation, Jihn-Sung Lai, Hsieh Wen Shen and Dihua Zhao, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p497-

A Hybrid Algorithm for Radionuclide Estimation, E. A. Yfantis, G. T. Flatman and F. S. Makri, (High Level Ra-dioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2063-2068.

Improving Dynamic Finite Element Models Using Test Data, N. S. Khot and D. E. Veley, (Engineering, Con-struction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p18-26.

An Inductive Knowledge-Based System for Mitigation of Bridge Fabrication Errors, Srinath Nagaraja and Hani Melhem, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1083-1090.

Interpretation of Nondestructive Integrity Tests Using Artificial Neural Networks, Glenn J. Rix, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p1346-1351.

Mapping Fractures Using Fresnel Volume Tomography, D. W. Vasco, John E. Peterson, Jr. and E. L. Maier, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2648-

Methodology for Comparing Lunar Settlement Designs, Keith Trivelpiece, (Engineering, Construction, and Op-erations in Space IV, Rodney G, Galloway, ed. and Stanley Lokaj, ed., 1994), p969-978.

Methods for Risk and Reliability Analysis, Larry W. Mays, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p26-44.

Modal Filter Based Structural Control of a Highway Bridge, S. J. Shelley, E. A. Aktan and K. L. Lee, (Analysis and Computation, Franklin Y. Cheng, ed., 1994),

p347-356.

Multi-Reservoir System Simulation Design Using C++ and Object Oriented Programming, Jesse Perla and K. Ponnambalam, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1030-1034

Novel Design Algorithms for K Factor Calculation and Beam-Column Selection, N. Agbayani, P. Jayachandran

and D. Sriram, ST Dec. 93, p3630-3648.

On the Dynamics and Control of Flexible Orbiting Systems: An Approach with Application, V. J. Modi and A. Suleman, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1-17.

Parallel Algorithms for Integrated Structural/Control Optimization, A. Saleh and H. Adeli, AS July 94, p297-314.

Plain flooding: near field and far field simulations, G. Braschi, F. Dadone and M. Gallati, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p45-59.

Prediction of Deep-Bed-Filter Performance Using Recursive Algorithms, C. S. P. Ojha and N. J. D. Graham, EE July/Aug. 94, p961-971.

PSF-PM Verification of 3D Free Surface Flow Models, Sam S. Y. Wang and F. Mauricio Toro-Botero, (Hydrau-Sain S. 1. Wang and F. Mauricio Foro-Botero, (ryarau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p895-899. Reliability Analysis of Water Distribution Systems, Rafael

G. Quimpo, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed.

and Eugene L. Stakhiv, ed., 1994), p45-55.
Road-Maintenance Planning Using Genetic Algorithms. I: Formulation, W. T. Chan, T. F. Fwa and C. Y. Tan, TE Sept./Oct. 94, p693-709.

Road-Maintenance Planning Using Genetic Algorithms. II: Analysis, T. F. Fwa, C. Y. Tan and W. T. Chan, TE

Sept./Oct. 94, p710-722.

Rotating Crack Model and Fracture in a R/C Medium, Azadeh Parvin and Theodore G. Toridis, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1944-1950.

Spectral Representation of High-Frequency Space Shuttle Data, P. D. Spanos, L. J. Mushung, D. A. Nelson, Jr. and D. A. Hamilton, AS July 94, p315-327.

Stable Reinforced-Concrete Section-Analysis Procedure, C. R. Thewalt and B. Stojadinović, ST Oct. 94, p3012-3024

A Tank Moisture Model (TAMMO) for Describing Neu-troan Scan Data, Edward R. Siciliano, Hans Toffer and W. Todd Watson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1102-1103.

Alignment

ATLSS Connections with Moment Capacity, Richard B. Garlock, Le-Wu Lu and B. Vincent Viscomi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p743-748

Finite-Element Analysis of Elastoplastic Discontinuities, Paul Steinmann and Kaspar Willam, EM Nov. 94,

p2428-2442.

SDC Detector Foundation Requirements for the SSC, J. L. Western, M. W. Butalla, H. James Krebs and Gary W. Tulk, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p767-772.

Survey and Alignment of Particle Accelerators and Trans-port Lines, Robert E. Ruland, SU Feb. 94, p11-24.

Ultimate Depth of Scour Around Bridge Piers, Sarfaraz A Ansari and Alimul Qadar, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p51-55.

Checking Concrete Growth, Vann A. Newell, David T. Tanner and Charles D. Wagner, CE Jan. 94, p70-72.

Effect of Alkalinity on Copper Corrosion, Travis E. Meyer and Marc Edwards, (Critical Issues in Water and Waste water Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p9-16.

Effect of Fly Ash and Silica Fume on Alkali Silica Reactions, Mette Geiker and Niels Thaulow, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p123-136.

Fly Ash and Alkali-Aggregate Reaction, Michael Thomas, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994),

Integration of Multiple Advanced Analytical Techniques to Study Alkali Silica Reactivity in Concrete Railroad Ties, R. J. Lee, A. J. Schwoeble, K. E. Wagner and J. Yuan, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p217-229.

Service Life Prediction, ASR Deterioration, Toy S. Poole and G. Sam Wong, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p16-26.

A Study of Alkalinity Leaching and Residual Strength of Alkaline Stabilized Sludge, Andrew P. Kruzic and Thomas M. Petry, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p129-136.

TEM Studies of Carbonation and ASR, G. W. Groves, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p211-216.

Allocations

Clinton Administration's Investment Budget for FY1995, CE Apr. 94, p128.

In Clinton Budget, ISTEA Funding Gains Ground, Spending for Science and Technology also Gets Boost, NE Mar. 94, p16.

Criteria for Evaluating Flow Classes in Alluvial Channels, Prabhata K. Swamee and Chandra Shekhar P. Ojha, HY May 94, p652-658.

Field Evaluation of the Sediment Transport Model "Stream" with a Bank Erosion Component, Deva K. Borah and Mona S. Dashputre, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p979-983.

Flow Resistance of High-Gradient Gravel Channels, R. G. Millar and M. C. Quick, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p717-721.

Lacey Divergence Equations for Alluvial-Canal Design, S. V. Chitale, HY Nov. 94, p1320-1326.

Seepage Effects on Sand-Bed Channels, Achanta Ramakrishna Rao, Vedula Subrahmanyam, S. Thayumanavan and Damodaran Namboodiripad, IR Jan./Feb. 94, p60-

Theoretically-Derived Regime River Width, Pierre Y. Ju-lien, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p949-953.

Toe Scour Protection Methods, Stephen T. Maynord, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1035-1039.

Using the SedBed Monitor to Measure Bed Load, Roger A. Kuhnle and Robert W. Derrow, II, (Fundamentals and Advancements in Hydraulic Measurements and Experi-mentation, Clifford A. Pugh, ed., 1994), p129-138.

Alluvial deposits

Self-Hardening Slurry Supports Shaft, CE Mar. 94, p92.

Alluvial fans

Comparison of Results from Alluvial Fan Design Methodology with Historic Data, Syndi J. Flippin and Richard H. French, IR Jan./Feb. 94, p195-210.

Two-Dimensional Water Flood and Mudflow Simulation, J. S. O'Brien, P. Y. Julien and W. T. Fullerton, HY Feb. 93, p244-261.

Alluvial streams

Coarse Sediment Transport and the Maintenance of Fish Habitat in the Upper Colorado River, John Pitlick, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p855-859.

A Decision Support System for Administering Water Rights in an Alluvial Aquifer, John C. Tracy, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p287-290

Estimating Local Bed Shear Stress in Large Gravel-Bed Rivers, Peter R. Wilcock, Alan F. Barta and Conor C. C. Shea, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p834-838.

Impacts of Low Flows on the Alluvial Rivers of the South-

impacts of Low riows on the Antivar Rivers of the Southerwest Region of Bangladesh, Daryl B. Simons, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p125-129.

Impacts of Natural and Manmade Changes on the San Luis Rey River Environment, Chenchayya T. Bathala and W. Jeffery Moncrief, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p327-330.

Is Bedform Development Chaotic? César Mendoza-Cabrales, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p78-81.

Management of Sediments on the Red River Waterway Project, Phil G. Combs, C. Fred Pinkard, Jr., William H. Espey, Jr. and Ben Littlepage, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1125-1130.

Migration of Backward-Facing Step, Hong-Yuan Lee and Shie-Tsung Hwang, HY June 94, p693-705.

Selection of Gravel-Transport Formula for Stream Model-ing, Howard H. Chang, HY May 94, p646-651.

Streambed Armoring, C. O. Chin, B. W. Melville and A. J. Raudkivi, HY Aug. 94, p899-918.

Turbulence Measurements in Open-Channel Flows over Artificial Bed Forms, D. A. Lyn, HY Mar. 93, p306-326.

Visual Investigation of Field Bed-Load Sampling, Moustafa T. K. Gaweesh, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p233-241.

Width Adjustment: Relative Dominance in Unstable Alluvial Streams, Andrew Simon, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p974-978.

Dynamic Compaction of Saturated Silt and Silty Sand - A Case History, Jean C. Dumas, Nelson F. Beaton and Jean-François Morel, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p80-89.

Dynamic Properties of Gravels Sampled by Ground Freez-ing, Shigeru Goto, Shin'ya Nishio and Yoshiaki Yoshimi, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994),

The Influence of Fines Type and Content on Cyclic Strength, Joseph Patrick Koester, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and

Panos Dakoulas, ed., 1994), p17-33.

U-234/U-238 Ratio: Qualitative Estimate of Groundwater Flow in Rocky Flats Monitoring Wells, J. C. Laul, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2702-

Verification of A 1-Dimensional Model for Predicting Shallow Infiltration at Yucca Mountain, Joseph A Hevesi, Alan L. Flint and Lorraine E. Flint, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2323-2332.

Altimeters

Satellite Observations of Wave Heights in Arabian Sea and Bay of Bengal, Usha Natesan and S. P. Subramanian, WW Nov./Dec. 94, p576-579.

Strategic Ship Routing Impacts of Temporal Coverage with Real-time Satellite Altimeter-Based Current Information, Young-Kyun Lee, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p483-489.

Hydration of Aluminate Cements, Pierre Barrett and Danielle Bertrandie, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p132-174.

Phase Equilibria in the CaO - Al2O3 - SiO2- H2O System in Relation to Blended HAC Cements, K. C. Quillin, (Advances in Cement and Concrete, Michael W. Grutzeck,

vances in Cemeni and Concrete, Michael W. Gidleck, ed. and Shondeep L. Sarkar, ed., 1994), p615. An Ultra-Lightweight Advanced Technology Telescope for Space Applications, P. C. Chen, R. J. Oliversen, H. Hojaji, W. K. Chu and T. L. Wilson, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1422-1430.

Effects of Temperature and pH on Residual Aluminum in Alkaline-Treated Waters, John E. Van Benschoten, James N. Jensen and Md. A. Rahman, EE May/June 94, p543-559.

Practical Seepage Control in Existing Tunnels, J. Samuel Vance, Daniel J. Hurst and C. T. Goewey, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p888-895.

Simulation of Blast Pressure on Flexible Panels, Avinash C. Singhal, Debra Larson, Sanjay Govil and Vikram Karmakar, ST July 94, p2011-2020.

Dynamics of Coagulation of Clay Particles with Aluminum Sulfate, Hsiao-Wei Ching, Menachem Elimelech and Janet G. Hering, EE Jan./Feb. 94, p169-189.

Ozonization of Anaerobic Sludge Dewatering Centrate for Ammonia Removal, K. Ramalingam, V. Diyamandoglu and J. Fillos, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p423-427.

Amplification

1988 Armenia Earthquake. II: Damage Statistics Versus Geologic and Soil Profiles, M. K. Yegian, V. G. Ghahraman and G. Gazetas, GT Jan. 94, p21-45.

Deflection Amplification Factor for Seismic Design Provisions, Chia-Ming Uang and Ahmed Maarouf, ST Aug.

94, p2423-2436.

The Use of Coda Waves for Characterizing the Site Effect on Strong Ground Motion, Keitit Aki and Byau-Heng Chin, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p579-584.

Anaerobic digestion

Degradation of Acetate, Propionate, and Butyrate under Shock Temperature, Mustafa Öztürk, EE Mar./Apr. 93, p321-331.

Effect of HRT on Acidogenic Digestion of Primary Sludge, P. Elefsiniotis and W. K. Oldham, EE May/June 94,

Effect of Preagitation on Freeze-Thaw-Conditioned Sludge Dewaterability, P. Aarne Vesilind and Jiann-Long Chen, CR Dec. 94, p113-120.

Effect of Sludge Blend on Dewatering Characteristics, Ali Davarinejad and Nikolay Voutchkov, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p273-280.

Reducing Wastewater Sludge Pathogens Using Heat Treatment, Mark Kennedy, Kondapalli Reddy and Lyle Johnson, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p281-288.

Anaerobic filters

Turning Up the Heat to Tame Sludge, ET Dec. 94/Jan. 95,

Anaerobic processes

Anaerobic Biodegradation of Chloroform under Methanogenic Conditions, Devesh, Munish Gupta, Makram T. Suidan and Gregory D. Sayles, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p609-616.

Assessment of BNR Systems in Florida, Richard O. Mines, Jr. and C. William Woods, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare

Edwards, ed., 1994), p436-443.

Biodegradation of 2,4-Dinitrotoluene in a Two Stage System, S. L. VanderLoop, M. T. Suidan, M. A. Moteleb and S. W. Maloney, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p710-717.

The Evaluation of Empty Bed Contact Time on the Biodegradation of Pentachlorophenol using an Anaerobic degradation of Pentacinoropienol using an Anaerootic GAC Fluidized Bed, Gregory J. Wilson, Julie A. Wagner, Amid P. Khodadoust, Makram T. Suidan and Richard C. Brenner, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p624-631.

Histological Analysis of Microstructure of UASB Granules, H. K. Chui and H. H. P. Fang, EE Sept/Oct.

94, p1322-1326.

Optimization Studies of Anaerobic Expanded Bed Reactor Pretreatment of Domestic Wastewater, Thomas L. Theis, Bruce J. Alderman and Anthony G. Collins, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p289-296.

ORP Measurement in Anaerobic Systems Using Flow-Through Cell, Munish Gupta, Ashutosh Gupta, Makram T. Suidan, Gregory D. Sayles and Joseph R. V. Flora, EE

Nov./Dec. 94, p1639-1645.

Ozonization of Anaerobic Sludge Dewatering Centrate for Ammonia Removal, K. Ramalingam, V. Diyamandoglu and J. Fillos, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p423-427.

Removal of Formate from Wastewater by Anaerobic Process, Ho Kwong Chui, Herbert H. P. Fang and Yu You Li, EE Sept./Oct. 94, p1308-1320.

Analogs

The Cigar Lake Analog Study: An Interational R&D Pro-ject, Jan J. Cramer and F. Peter Sargent, (High Level Ra-dioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2237-2242.

Immobilizing the Calcined High Level Waste in Glass and Crystalline Phases, S. V. Raman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1124-1130.

Natural Analogues and Performance Assessment, Paul L. Cloke, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p1329-1336.

The Nuclear Regulatory Commission's Trojan Nuclear Power Plant Seismic Design Licensing Case as an Analog to Alternative Repository Licensing Strategies, Maurice Axelrad and Michael A. Bauser, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p1573-1577.

Radiation Effects from Uranium Ore Bodies, James O. Duguid, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p1337-1343.

Terrestrial Analogs: Implications for Lunar Lava Tubes, Cassandra R. Coombs and B. Ray Hawke, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1138-

Use of An Analog Site Near Raymond, California, To Develop Equipment and Methods for Characterizing a Po-tential High-Level, Nuclear Waste Repository Site at Yucca Mountain, Nevada, Amjad M. J. Umari, Arthur Geldon, Gary Patterson, James Gemmell, John Earle and Jon Darnell, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2413-2422.

Analysis

Analysis of CE-Related Research Notes Lack of Strategy and Direction, NE Feb. 94, p5. Arching in Piled Embankments, B. K. Low, S. K. Tang and

V. Choa, GT Nov. 94, p1917-1938.

Buckling Mode Change of Antisymmetric Angle-Ply Laminates, Wen-Chi Chen, EM Mar. 94, p661-669.

Comparison of Wave Reflection Equations with Wave-Tank Data, Dennis C. Cotter and Subrata K. Chakrabarti, WW Mar./Apr. 94, p226-232.

Compression Response of Cracked Reinforced Concrete, F. J. Vecchio and M. P. Collins, ST Dec. 93, p3590-

3610.

Convergence and Divergence Between Regulated Riparian and Prior Appropriation Provisions in the ASCE Model State Water Rights Code, Ray Jay Davis, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p465-468.

Free-Vibration Analysis of Point-Supported Orthotropic Plates, D. J. Gorman, EM Jan. 94, p58-74.

Frequency of the 1993 Flood in the Upper Mississippi River Basin, W. O. Thomas, Jr. and D. A. Eash, (Hy-draulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p16-20.

Inverse Transient Analysis in Pipe Networks, James A. Liggett and Li-Chung Chen, HY Aug, 94, p934-955. Lateral Load Analysis of Groups of Piles and Drilled Shafts, Phillip S. K. Ooi and J. Michael Duncan, GT

June 94, p1034-1050.

Looking into Toxics, CE June 94, p19.

Mechanism of Biological Treatment in Plug-Flow or Batch Systems, Hasan Ali San, EE July/Aug, 92, p614-628.

Minimum Thickness of Compacted Soil Liners: II. Analysis and Case Histories, Craig H. Benson and David E.

Daniel, GT Jan. 94, p153-172

Nonlinear Hydrodynamic Pressures on Arch Dam Faces, Bang-Fuh Chen and Ing-Sen Yuan, (Hydraulic Engi-neering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p411-415.

Nonlinear Reservoir Routing: Particular Analytical Solution, H. A. Basha, HY May 94, p624-632

Postbuckling Behavior of Steel-Plate Shear Walls under Cyclic Loads, M. Elgaaly, V. Caccese and C. Du, ST Feb. 93, p588-605.

Seismic Behavior of Open-Web Truss-Moment Frames, Subhash C. Goel and Ahmad M. Itani, ST June 94, p1763-1780.

Shoreline Solution for Tapered Beach Fill, Todd L. Walton, Jr., WW Nov./Dec. 94, p651-655.

Space Station Microgravity Analysis and Assessment, John P. Wetzel, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p463-472.

Analytical techniques

Analysis of a Concrete Cylinder with a Composite Hoop Wrap, Christopher P. R. Hoppel, Travis A. Bogetti, John W. Gillespie, Jr., I. Howie and Vistasp M. Karbhari, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p191-198.

Analysis of Foundation Settlement Due to Earthquake, Jian Zhou and Jian Du, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p798-805.

Applicability of Pseudo-force method to Highly Nonlinear Dynamic Problems, Satish Nagarajaiah and Andrei Reinhorn, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p165-172.

Application of the Phase Change Process to One-Dimensinal Consolidation Behavior of Peat, Keiji Kogure, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p677-687.

Comparisons of Directional Wave Analysis Methods, Taerim Kim, Lihwa Lin and Hsiang Wang, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and

J. Michael Hemsley, ed., 1994), p554-568.

Crack Detection in Beams - Sensitivity Studies, Lidvin Kjerengtroen and Christopher Jenkins, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p483-490.

Estimation of Spread-Footing Settlement on a Sand Subgrade, John S. Horvath, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p145-148.

Geocell Mattress Effects on Embankment Settlements, Mark D. Evans, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p584-597.

Hydraulics of Center-Pivot Laterals, Edmar J. Scaloppi and Richard G. Allen, IR May/June 93, p554-567.

Integration of Multiple Advanced Analytical Techniques to Study Alkali Silica Reactivity in Concrete Railroad Ties, R. J. Lee, A. J. Schwoeble, K. E. Wagner and J. Yuan, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p.217-229.

Settlement Predictions at a Florida Port Facility. Thomas E. Selfridge and Kirk A. McIntosh, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p571-583.

Anchor bolts

Assessment of Rock Bolt Systems for Underground Waste Storage, Wesley T. Leedy and Robert J. Watters, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p691-695.

Steel-Concrete Interaction by Means of Film Sensors, Marco di Prisco and Alessandro Gandelli, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p815-820.

Anchorages

Anchorage of Non-Metallic Prestressing Tendons, Richard J. Schmidt, Charles W. Dolan and Lars E. Holte, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1415-1420.

Bar Yield Penetration in Monotonically Loaded Anchorages, John F. Bonacci, ST Mar. 94, p965-986.

Construction of Akashi-Kaikyo Bridge West Anchorage, Nobuaki Furuya, Reizou Yamaoka and Boyd C. Paulson, Jr., CO June 94, p337-356.

Critique - Manufactured Housing Session, Frank Walter, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p203-212.

The Manufactured Home Dilemma, James R. McDonald, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p195-202.

Mohlera Mallysis of Prestressed Concrete Structures, Mohd-Hisham Mohd-Yassin and Filip C. Filippou, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1421-1426.

Loodno, ed., 1994), p1421-1420.
 Overview - Electrical Substation Structures Design Guide,
 Leon Kempner, Jr., (Structures Congress XII, N. C.
 Baker, ed. and Barry J. Loodno, ed., 1994), p597-600.

Performance of Manufactured Housing in Louisiana During Hurricane Andrew, Marc L. Levitan, Leighton S. Cochran and Janet E. Levitan, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p166-175.

sons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p166-175. Survivability of Manufactured Housing in Hurricanes, John M. Dye, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p176-184.

Tests of Yielding Anchorages Under Monotonic Loadings, John F. Bonacci and Jorge Marquez, ST Mar. 94, p987-997

Anchoring

Software for marina anchoring design on chains or cables, Gilles Collin, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p398-405.

Tahoe Walls Anchored Quickly and Cleanly, CE Jan. 94, p90.

Anchors

Anchorage of Non-Metallic Prestressing Tendons, Richard J. Schmidt, Charles W. Dolan and Lars E. Holte, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1415-1420. Detailing Effects in Anchors for FRP Prestressing Tendons, Todd Stueve, Charles W. Dolan and David E. Walrath, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p386-391.

Floor to Wall Anchors in Historic Brick Buildings, W. Bradford Cross and Nicholas P. Jones, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1569.

Locking Into Success, Brian H. Greene, Andrew Schaffer, Donald A. Bruce and John A. Gerlach, CE Apr. 94, p48-50.

Rock Anchors Keep 'Boat' From Falling, CE Dec. 94, p11. The Slender Tower of 52-54 East End Avenue, Ahmad Rahimian, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1562-1567.

Tahoe Walls Anchored Quickly and Cleanly, CE Jan. 94, n90.

Vertical Uplift Capacity of Horizontal Anchors, Kanakapura S. Subba Rao and Jyant Kumar, GT July 94, p1134-1147.

Anderson, J.E.

Charles A. Parthum Is 1994 Nominee for ASCE President-Elect, NE July 94, p3.

Anemometer

Averaging Time and Maximum Speeds in Hurricanes, Naveen Aerrabotu and Timothy A. Reinhold, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p467-472.

Combined Oscillatory and Steady Flow Over Ripples, K. I. Mahesha Ranasoma and John F. A. Sleath, WW July/

Aug. 94, p331-346.

An Investigation of Turbulence in Open Channel Flow via Three-component Laser Doppler Anemometry, Mahalingam Balakrishnan and Clinton L. Dancey, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p159-175.

Laboratory and Field Evaluation of Acoustic Velocity Meters, Tracy Vermeyen, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p43-52.

Optical Methods for Sediment-Laden Flows, R. N. Parthasarathy and M. Muste, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p223-232.

Response of Velocity and Turbulence to Abrupt Changes from Smooth to Rough Beds in Open-channel Flows, Ichisa Nezu and Akhiro Tominaga, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p195-206.

Standardizing Wind Measurements for Documentation of Surface Wind Fields in Hurricane Andrew, Mark D. Powell, Samuel H. Houston and Timothy A. Reinhold, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p52-69.

Anisotropic materials

Stresses in Anisotropic Rock Mass with Irregular Topography, Ernian Pan and Bernard Amadei, EM Jan. 94, p97-119.

Anisotropic soils

Model Prediction of Anisotropic Behavior of Boston Blue Clay, Andrew J. Whittle, Don J. DeGroot, Charles C. Ladd and Tian-Ho Seah, GT Jan. 94, p199-224.

Performance of Anisotropic Geosynthetic-Reinforced Cohesive Soil Mass, Hoe I. Ling and Fumio Tatsuoka, GT July 94, p1166-1184.

Anisotropy

Air-Permeability Measurement for Soil at Low and High Pressure, Shawn A. Rodeck, Bruce A. DeVantier and Braja M. Das, EE Sept./Oct. 94, p1337-1343.

Anisotropic Plasticity Model for Foams and Honeycombs, H. L. Schreyer, Q. H. Zuo and A. K. Maji, EM Sept. 94, p1913-1930.

Anisotropy Studies on Cuboidal Shear Device, N. Sivakugan, J-L. Chameau and R. D. Holtz, GT June 93, p973-983.

Formulation of MIT-E3 Constitutive Model for Overconsolidated Clays, Andrew J. Whittle and Michael J. Kavvadas, GT Jan. 94, p173-198.

Investigation of an Anisotropic k-e Model, Yun Zhang, Yongquan Yang and Chigong Wu, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), pl 280-1284.

Plane Orthotropic Layer by Transfer Matrix-Spline Boundary Element, L. Z. Jiang and J. S. Lee, EM May 94, p1026-1041.

Antonna

Determination of Look Angles to Geostationary Communication Satellites, Tomás Soler and David W. Eisemann, SU Aug. 94, p115-127.

Gravitational Wave Astronomy and the Lunar Ligo Concept, Norman LaFave and Thomas L. Wilson, (Engineering, Construction, and Operations in Space IV. Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1442-1451.

An Inflatable Antenna for Space-Based Low-Frequency Radio Astronomy, John P. Basart, Shreekanth A. Mandayam and Jack O. Burns, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1390-1399.

Thermal Response in Antenna Under Laser Irradiation, Leslie A. Blackham and Arsalan Razani, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p196-205.

Approximation

Approximate Elastic-Plastic Solution for Axially Loaded Piles, Ernesto Motta, GT Sept. 94, p1616-1624.

Approximate Form of Green-Ampt Infiltration Equation, Jeffry J. Stone, Richard H. Hawkins and Edward D. Shirley, IR Jan./Feb. 94, p128-137.

Approximate Formulas for Effective Length of Steel Columns, A. Gordon Smyrell, ST Sept. 94, p2793-2801.

A Generalized Approach to the Local Stability of Stiffened Plates: Part II-Approximate Solution, Archibald Shenbourne and Osama Bedair, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodio, ed., 1994). p1532-

Numerical Approach to Clarifier Operation According to Flux Theory, Bruce J. Alderman, Thomas L. Theis and Anthony G. Collins, EE May/June 94, p670-676.

Simple Method for Approximate Analysis of Framed Tube Structures, A. K. H. Kwan, ST Apr. 94, p1221-1239.

Approximation methods

Approximate Random Vibration Analysis of Classically Damped MDOF Systems, C. Papadimitriou and J. L. Beck, EM Jan. 94, p75-96.

Buckling Solutions of Rectangular Mindlin Plates under Uniform Shear, C. M. Wang, Y. Xiang and S. Kitipornchai, EM Nov. 94, p2462-2470.

Common Misconceptions about Neural Networks as Approximators, William C. Carpenter and Jean-Francois Barthelemy, CP July 94, p345-358.

Comparisons of Directional Wave Analysis Methods, Taerim Kim, Lihwa Lin and Hsiang Wang. (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p554-568.

Multi-Reservoir Systems Optimization by the Aggregation/Decomposition Methodology, M. Bessa, K. Ponnambalam and A. Bogobowicz, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p192-196.

Point-Estimate Method for Calculating Statistical Moments, K. S. Li, EM July 92, p1506-1511.

Aquatic environment

Biological and Physical Characterization of a Deep-Ocean Disposal Site off Northern California, James A. Blake, Catherine A. Courtney, Barbara Hecker, Brigitte Hilbig, Jo Ann Muramoto and Donald C. Rhoads, (Dredging '94, E. Clark McNair, Tr., ed., 1994), p111-120.

The National Spatial Data Infrastructure and its Usefulness to the Dredging Community, Milington Lockwood, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p516-

Aquatic habitats

Assessing Stormwater Impacts, G. Allen Burton, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1198-1202.

Construction of Intertidal Mudflats as a Beneficial Use of Dredged Material, G. L. Ray, D. G. Clarke, T. P. Wilber and T. J. Fredette, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p946-955.

Developing Design Parameters for Constructing Ecologically Functional Marshes Using Dredged Material in Galveston Bay, Texas, Lawrence P. Rozas and Roger J. Zimmerman, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p810-822.

Dredged Material in Chesapeake Bay, Maryland, S. D. Garbarino, R. N. Blama, M. C. Landin, S. R. Maynord and T. R. Patin, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p384-393.

Estimating Past Precipitation and Temperature from Fossil Ostracodes, Alison Jean Smith and Richard M. Forester, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2545-2552.

Flushing Flows for the Water Manager, Robert T. Milhous, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p.226-229

Habitat Considerations: Galveston Bay Demonstration Marsh, Andrew V. Sipocz, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p823-827.

Habitat Restoration Using Dredged Material: The Sonoma Baylands Wetland Demonstration Project, Scott P. Miner, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p928-937.

Habitat Value of Offshore Dredged Material Berms for Fishery Resources, Douglas Clarke and Richard Kasul, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p938-945.

The Management of Dredged Material Placement for the Development of Oyster Rock on the Eastern Shore of Virginia, Walter I. Priest, III, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p394-398.

On Habitat Simulation in Mountain Rivers, Robert T. Milhous, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p850-854.

Plans, Design, and Construction of a 100-Hectare Intertidal Demonstration Marsh Using Large-Scale Cutter Head Dredging Equipment in Galveston Bay, Texas, Keith P. Kindle, (*Oredging '94*, E. Clark McNair, Jr., ed., 1994), p833-842.

Restoration and Capping of Contaminated Sediments, Carl E. Stivers and Robert Sullivan, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1017-1026.

Restoring and Protecting Marine Habitat, Thomas A. Sands and Wayne Young, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p368-377.

Aqueducts

Involving the Public to Reach Consensus in Water Resources Projects - An Interdisciplinary Perspective, Lee Judd, Ken Steele, Sara Katz and Scott McCreary, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p513-516.

Using Hydrophones to Monitor Prestressed Concrete Pipe for Reinforcing Wire Failures, Douglas J. Buchanan, Malin L. Jacobs and Fred A. Travers, (*Hydraulics of Pipelines*, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p212-225.

Aquifer tests

Non-steady-Flow Type Curves for Strip Aquifers with Constant Drawdown, Halil Onder, IR July/Aug. 94, p732-741.

Aquifers

Application and Benefits of Aquifer Recharge in Santa Fe, New Mexico, Kevin Bral, Mark Fenton and Mike Slota, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p21-24. Aquifer Remediation Design: Nonlinear Programming and Genetic Algorithms, Daene C. McKinney, Gregory B. Gages and Min-Der Lin, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p254-257.

Aquifer Storage and Recovery at the Centennial Water and Sanitation District, Andrea Aikin, Courtney Hemenway and Paul Grundemann, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry

N. Tuvel, ed., 1994), p592-595.

Aquifer Storage and Recovery in the Floridan Aquifer System of South Florida, Albert Muniz and William B. Ziegler, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p69-72.

- Artificial Recharge of Aquifers, Charles L. Joy, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p376-383.
- An Attempt of an Aquifer Model with Lack of Data, Octavio Cabezut-Boo, Ricardo Anza and Luis Tubilla, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p312-316.
- Computer Simulation Model of the Integrated Local Water Supply Plan for the City of Wichita, Kansas, Jerry Blain, Gene Foster, Jeff Klein and Frank Shorney, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p734-737.
- Computer simulation of pulsed pumping for remediation under mass transfer limited conditions, Z. Jiang and W. P. Ball, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p352-359.
- Confined Aquifer Parameters from a Pump Test Near an Impermeable Boundary, Stephen J. Burges, HY July 93, p838-845.
- A Decision Support System for Administering Water Rights in an Alluvial Aquifer, John C. Tracy, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p287-
- Decision Support System for Conjunctive Use Under Complex Water Right Conditions, Jeffrey W. Fredericks, John W. Labadie and Jon Altenhofen, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p582-587.
- Density-dependent Circulation in Desert-basin Aquifers with Isotropic Self-Similar Permeability Distributions, Gilberto E. Urroz and Daoqiong Yang, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p87-91.
- Development of Transport Model for Groundwater Planning and Management in Taipei Basin, Nien-Sheng Hsu, Ming-Jame Horng, Chian Min Wu, William W-G. Yeh and Jan-Tai Kuo, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),
- Drawdowns for Leaky-Aquifer Flow with Storage in Fi-nite-Width Sink, Louis H. Motz, IR July/Aug. 94, p820-
- Estimation of Field Site Flow Parameters, Yahia Majali, Salwa Rashad, John Hoopes and Tswn-Syau Tsay, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p303-307.
- Evaluation of the Water Supply Potential of the Floridian Aquifer in Seminole County, Florida, Lee P. Wiseman, Robert P. Schreiber, Ricardo Diaz and Charles J. Voss, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p600-603.
- Groundwater Development and Related Issues, Abdul Hannan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p308-311.
- Groundwater Modelling As a Management Tool, Courtney C. Hemenway, Al Eddebbarh and Paul Grundemann, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p596-599.

Historical and Enhanced Edwards Aquifer Recharge, Samuel K. Vaugh, Kelly J. Kaatz and Kenneth L. Choffel, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p380-383.

How Many Observation Wells Does it Take to Find a Groundwater Contamination Plume? Bruce R. James and Steven M. Gorelick, (Computing in Civil Engineering,

Khalil Khozeimeh, ed., 1994), p197-199.

Improving Subsurface Characterization and Prediction of Contaminant Transport, Salva Rashad and Craig H. Benson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p277-

In Situ Treatment of VOCs by Recirculation Technologies, O. F. Webb, R. L. Siegrist, M. R. Ally, W. E. Sanford, P. M. Kearl and J. L. Zutman, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p572-579.

Kinetics of Toluene Degradation by Denitrifying Aquifer Microorganisms, Pedro J. J. Alvarez, Paul J. Anid and Timothy M. Vogel, EE Sept./Oct. 94, p1327-1336.

- Mitigation of Non-Point Source Pollution Impacts on Groundwater Aquifers: A Case Study, Erez Sela, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p246-249
- Modeling 3-D Ground Water Mounding, Tswn-Syau Tsay, John Hoopes, Salwa Rashad and Yahia Majali, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p317-321.
- Monitoring Petroleum Contamination in an Aquifer, Paramesh Anantharaman and Joseph C. Cataldo, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p272-276.
- A New Angle on Ground-Water Remediation, Vernon M. Reid, Kennon W. Wyatt and James A. Horn, CE Apr. 94,
- Non-steady-Flow Type Curves for Strip Aquifers with Constant Drawdown, Halil Onder, IR July/Aug. 94, p732-741.
- Optimal Capacity-Expansion Planning in Multiaquifer Systems, Hakan Başağaoğlu and Hasan Yazıcıgil, WR Nov./Dec. 94, p836-856.
- Optimal Operation of Soil Aquifer Treatment System, Zongwu Tang and Larry W. Mays, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p441-444.
- Partial Infeasibility Method for Chance-Constrained Aqui-fer Management, Nathan Chan, WR Jan./Feb. 94, p70-
- Risk Management in Wellhead Protection, David A. Chin and Prasad V. K. Chittaluru, WR May/June 94, p294-
- Stochastic Analysis of Ground-Water Flow in Semiconfined Aquifer, Mysore G. Satish and Jianting Zhu, HY Feb. 94, p147-168
- Thermally Enhanced Bioremediation of a Gasoline-Contaminated Aquifer Using Toluene Oxidizing Bacteria, Rula Deeb and Lisa Alvarez-Cohen, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p400-407
- Transient Canal Seepage to Sloping Aquifer, Sheik M. H. Yussuff, H. S. Chauhan, Manoj Kumar and V. K. Srivastava, IR Jan./Feb. 94, p97-109.
- Transient Radius of Influence Model, Shu Tung Chu, IR Sept./Oct. 94, p964-969.
- Use of An Analog Site Near Raymond, California, To Develop Equipment and Methods for Characterizing a Potential High-Level, Nuclear Waste Repository Site at Yucca Mountain, Nevada, Amjad M. J. Umari, Arthur Geldon, Gary Patterson, James Gemmell, John Earle and Jon Darnell, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2413-2422.
- Using Cavity Well to Determine Aquifer Thickness and Constants, Mohammad Saleem, IR May/June 94, p504-

Water Policy and Management: Solving the Problems in Southern New Jersey, Frank S. Impagliazzo, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p497-500.

Detailing Effects in Anchors for FRP Prestressing Tendons, Todd Stueve, Charles W. Dolan and David E. Walrath, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p386-391.

Contemporary Model of Civil Engineering Failures, Richard L. Meehan, Brian Chun, Sang-wuk Ji, Stephanie King, Knut Ronold and Frank Yang, El Apr. 93, p138-

Contractor's Procedural Failure Opens Door to Arbitration, CE Nov. 94, p26.

Dispute Avoidance and Resolution for Consulting Engineers, Richard K. Allen, 1993, 0-87262-903-1, 85pp. Dispute Resolution Giving Way to Dispute Prevention, CE

Apr. 94, p20.

Five Steps to Resolving Construction Disputes-Without Litigation, Richard H. Steen, ME July/Aug. 94, p19-23.

More Than an Underground Success, James Denning, CE Dec. 93, p42-45.

No Registration, No Arbitration, CE Nov. 94, p26. Subcontractor Held to Dispute Resolution, CE Aug. 94, p24.

Archaeology

The Future of the Past: Historic Preservation at the Metropolitan Washington Airports, H. Henry Ward, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p8-17.

Arches

Analytical Approach to Collapse Mechanisms of Circular Masonry Arch, Carlo Blasi and Paolo Foraboschi, ST Aug. 94, p2288-2309.

Ground-Motion Spatial Variation Effects on Circular Arch Responses, Hong Hao, EM Nov. 94, p2326-2341.

Large Deformation Theory Using Truncated Rotations, Daniel A. Miller and Anthony N. Palazotto, (Engineer-ing, Construction, and Operations in Space IV, Rodney Galloway, ed. and Stanley Lokaj, ed., 1994), p137-146.

Limit States Analysis of Masonry Arches, Thomas E. Boothby, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p797-802.

Stability of Masonry Piers and Arches Including Sliding, Thomas E. Boothby, EM Feb. 94, p304-319. Thin-Walled Curved Beams. II: Analytical Solutions for Buckling of Arches, Young J. Kang and Chai H. Yoo, EM Oct. 94, p2102-2125.

Arching in Piled Embankments, B. K. Low, S. K. Tang and V. Choa, GT Nov. 94, p1917-1938.

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Baker, ed. and Barry J. Loodno, ed., 1994), p1256-1261.

Building the Urban Environment, Candace Port-Hull, WP Spring 94, p41-42.

Critique on Building Envelope Sessions, Peter R. Sparks, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p529-532.

Organizational Attitudes of Senior Professionals, George Bennett and John Whittaker, ME May/June 94, p35-40.

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Advances and Challenges in Case Based Design, Gerhard Schmitt, Simon F. Bailey and Ian F. C. Smith, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p301-309.

AIA Awards Celebrate the Old and the New, CE Apr. 94,

p14.

Airport Terminal Design Challenges, Daniel J. Feil, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p18-25.

Alternative Habitat Concepts for the First Lunar Outpost, Kriss Kennedy and Michael Roberts, (Engineering, Con-struction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1020-1035.

Architecture and Lightweight Structures: A Methodical Design Approach, Vinzenz Sedlak, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1010-1023.

The Body Language of Tensile Structures, Todd Dalland, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p990-999.

Bridging the Gap Between Architecture and Engineering, Thomas L. Harrison, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1256-1261.

Building Product Model, A First Brick in Computer Integrated Construction, Michael J. Riley and Hamid H. R. Sabet, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p767-777.

Case-Based Preliminary Building Design, Simon F. Bailey and Ian F. C. Smith, CP Oct. 94, p454-468.

Civil Engineering and Civic Monuments: The Commissioning, Design and Public Perception of Urban Infrastructure Projects, Anthony C. Webster, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1244-1249.

Computer-Integrated Construction and CM Firms: A Profitable Combination, Ed Ott, Matt Syal and Gary Gehrig, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1751-1755.

Concrete Shells Today, Heinz Isler, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p820-836.

Management on Distributed Configurations, Sanjai Tiwari and H. C. Howard, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1607-1614.

A Decision Support System for the Expansion of Interna-tional Operations of A/E/C Firms, Makarand Hastak, D. W. Halpin and Jorge A. Vanegas, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p735-742.

Developments to the IRMA Model of AEC Projects Thomas Froese, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p778-785.

Effect of Materials Architecture ffect of Materials Architecture on Strengthening Efficiency of Composite Wraps for Deteriorating Columns in the North-East, I. Howie and V. M. Karbhari, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p199-206.

Fabric Structures for Public Buildings, Horst Berger, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994),

p583-591.

A Framework for Collaborative Distributed Facility Engineering, Taha Khedro, Michael R. Genesereth and Paul M. Teicholz, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1489-1496.

Functional Analysis of the Envelope Design Process for Integrated Building Design, Hugues Rivard, Claude Bédard, Kinh H. Ha and Paul Fazio, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p71-78.

Habitat Configuration Evaluation Criteria for Moon/Mars, Kriss J. Kennedy, (Engineering, Construction, and Op-erations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p979-987.

How do Integration and Data Models Add Value to a Pro-ject? Martin Fischer, Thomas Froese and Douglas Phan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p992-997.

Hyper-Geodesic Structures: Excerpts from a Visual Catalog, Haresh Lalvani, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina

U. Penalba, ed., 1994), p1053-1064.

Implementation of an Object-Oriented Knowledge Representation Scheme for the Development of an Intelligent CAD Interface, Nabil Kartam, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1772-1778.

Improving the Performance of Architectrual Glazing in Hurricanes, Joseph E. Minor and Richard A. Behr, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani,

ed., 1994), p476-485.
Information Modeling and Applications, Victor E. Sanvido, Kirby A. Kuntz, Theodore D. Lynch, John I. Messner and David R. Riley, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p786-789.

Integrated System Environment Using an Object-Oriented Project Model with Multiple-Views, Kenji Ito, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1204-1211

Interactive Cost Estimating During Design, Robert I. Carr, Hyun-Soo Lee and Photios G. Ioannou, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1556-1563.

ues and Experiences in Developing Shared Object Models, D. H. Douglas Phan and H. Craig Howard, (Comput ing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

Knowledge Issues in Modeling, Hossam El-Bibany, (Computing in Civil Engineering, Khalil Khozeimeh, ed.,

1994), p579-583.

Making an Olympic Stadium and a Baseball Park, Scott W. Braley and David P. Tabor, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p188-192.

Membrane Structures: Technological Innovation and Architectural Opportunity, Edmund Happold, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p547-559.

A Minimum Mars Mission Approach, Systems Engineering Division Mars Study Team, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1309-1322. New ASCE Journal to Address A/E Practice, CE Dec. 94,

p72.

Prisms and Antiprisms, Pieter Huybers and Gerrit van der Ende, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba,

ed., 1994, p142-151.

Qualification System for Building Engineers in Korea, LiHyung Lee and Waon-Ho Yi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p215-220.

Recent Advances in Engineering Design Methodologies, Steven J. Fenves, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p14-24.

Scaling Up is Hard to Do: Experiences in Preparing a Case-Based Design Aid Prototype for Field Trial, Eric A. Domeshek, Craig M. Zimring and Janet L. Kolodner, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p430-437.

Space Frames and Polyhedra, J. François Gabriel, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994),

p1036-1044.

Staffing and Projects Grow Slightly in 1993, CE June 94,

The Structuring of a New Architectural Landscape, Karen Van Lengen, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p956.

Tensegrity Structures: Filling the Gap Between Art and Science, Michele Melaragno, (Spatial, Lattice and Ten-sion Structures, John F. Abel, ed., John W. Leonard, ed.

and Celina U. Penalba, ed., 1994), p1024-1035.
Tensile Structures Highlight New Denver Airport, Horst Berger and Edward M. DePaola, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p957-968. Viaduct Re-Created in its Own Image, CE Feb. 94, p20-21.

Argentina outlook, WP Spring 94, p4, Argentina: Back in Business, Kaitlin Quistgard, WP Spring 94, p19-22.

ASCE President Leads Visit to South American Countries, NE July 94, p16.

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Asphalt Pavement Temperature Related to Arid Saudi Environment, H. I. Al-Abdul Wahhab and F. A. Balghunaim, MT Feb. 94, p1-14.

Developing Economic Performance Information for Water Management Projects in North China, Ari M. Michelsen and Jona Bargur, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p641-644.

Effect of Saline Irrigation Water on Tree Growth, Ghulam Hussain and Otto J. Helweg, IR Sept./Oct. 94, p970-978. Effectiveness of Water-Conservation Measures in Greater

Athens Area, Helen Briassoulis, WR Nov./Dec. 94, p764-777.

Shallow Infiltration Processes in Arid Watersheds at Yucca Mountain, Nevada, Lorraine E. Flint, Alan L. Flint and Joseph A. Hevesi, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2315-2322.

Transmission Losses from Ephemeral Stream in Arid Region, Mohamed J. Abdulrazzak and Ali U. Sorman, IR May/June 94, p669-675.

Arizona Groundwater Management Alternatives, James F. Booker, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel,

ed., 1994), p351-354.

Development of an Intergovernmental Agreement For a Major Multi-Party Recharge Project in Central Arizona, Richard S. Siegel, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p533-536.

Floodflow Effects on Riparian Vegetation in Arizona, J. V. Phillips and H. W. Hjalmarson, (Hydraulic Engineering 94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p707-711.

Subcontractor May Share Some Site-Safety Burden, CE Nov. 94, p26. Taking Trash Out of Hiding, Keith R. Connor, R. Chris Brockway and Bruce E. Henning, CE Feb. 94, p40-43.

1988 Armenia Earthquake. I: Seismological, Geotechnical, and Structural Overview, M. K. Yegian, V. G. Ghahraman and G. Gazetas, GT Jan. 94, p1-20.

1988 Armenia Earthquake. II: Damage Statistics Versus Geologic and Soil Profiles, M. K. Yegian, V. G. Ghahra-

man and G. Gazetas, GT Jan. 94, p21-45.

Ground-Motion and Soil-Response Analyses for Leninakan, 1988 Armenia Earthquake, M. K. Yegian, V. G. Ghahraman and G. Gazetas, GT Feb. 94, p330-348

Liquefaction and Embankment Failure Case Histories, 1988 Armenia Earthquake, M. K. Yegian, V. G. Ghahra-man and R. N. Harutiunyan, GT Mar. 94, p581-596.

Seismological, Soil and Valley Effects in Kirovakan, 1988 Armenia Earthquake, M. K. Yegian, V. G. Ghahraman and G. Gazetas, GT Feb. 94, p349-365.

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Breakwater Armor Damage due to Wave Groups, Josep R. Medina, Robert T. Hudspeth and Claudio Fassardi, WW Mar./Apr. 94, p179-198.

Fraser Lands Riverfront Park Shoreline Edge Treatments, Stanley R. Cowdell and Harold C. Westerman, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p114-123. Modeling Impact of Armour Blocks, M. A. G. Silva, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p187-204.

Offshore Rescue, Jonathan A. French, Paul Gustafson, John S. Murk and Kellene M. Burn-Lucht, CE Oct. 94, p42-

45.

Wave-Induced Forces on Armor Unit on Berm Breakwaters, Alf Tørum, WW May/June 94, p251-268.

Aromatic hydrocarbons

Biodegradation of Phenanthrene in Sand Columns in the Presence of Nonionic Surfactants, David Norris and Tariq Ahmed, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p360-367.

Source-Receptor Modeling of PAHs Using Deposition Levels in Winter-Long Urban Snowpack, M. Sharma, E. McBean, N. Thomson and J. Marsalek, EE Sept./Oct. 94,

p1248-1265.

Arsenic

Arsenic Removal by Manganese Greensand Filters, Thon Phommavong and T. Viraraghavan, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p646-653.

Arsenic Removal Via Softening, Laurie McNeill and Marc Edwards, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed.,

1994), p640-645.

Removal of Arsenic by Enhanced Coagulation and Membrane Technology, S. David Chang, Hector Ruiz, William D. Bellamy, Carl W. Spangenberg and Debra L. Clark, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p632-639.

Artesian aquifers

Field-Test Results of Aquifer Thermal Energy Storage at St. Paul, Minnesota, M. Hoyer, J. Hallgren, S. Eisenreich and R. Sterling, EY Aug. 94, p67-85.

Artesian pressure A Case History of Settlement of an Embankment on Lagonal Deposits Influenced by Artesian Conditions, An-Bin Huang and Bob Y. K. Wong, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p426-435.

Artificial intelligence

Application of Fuzzy Logic in Civil Engineering in Japan. Hitoshi Furuta, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p1900-1907.

Bridge Evaluation Using a Hybrid Information System, John L. Wilson and Stephanie J. Wagaman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1131-1136.

Neural Network, Yi-Cherng Yeh, Yau-Hwaug Kuo and Deh-Shiu Hsu, CP Jan. 93, p71-93.

Case-Based Preliminary Building Design, Simon F. Bailey and Ian F. C. Smith, CP Oct. 94, p454-468.

Common Misconceptions about Neural Networks as Approximators, William C. Carpenter and Jean-Francois Barthelemy, CP July 94, p345-358.

Computing in Civil Engineering, 2 vols., Khalil Khozeimeh, ed., 1994, 0-7844-0026-1, 2275pp. Computing Truck Attributes with Artificial Neural Networks, N. Gagarin, I. Flood and P. Albrecht, CP Apr. 94, p179-200.

Geometric-Based Reasoning System for Project Planning, A. A. Morad and Y. J. Beliveau, CP Jan. 94, p52-71.

Intelligent Tutoring Systems to Aid Water Treatment Plant Operators, Anthony G. Collins, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p107-114.

KBES for Process Control of Nitrification in Activated Sludge Process, Naci H. Ozgur and Michael K. Stenstrom, EE Jan./Feb. 94, p87-107.

Modeling of a Knowledge-Based Object-Oriented CAD System for Architectural and Structural Design, Undine Kunze, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1791-1797. Neural Networks in Civil Engineering. I: Principles and Understanding, Ian Flood and Nabil Kartam, CP Apr. 94, p131-148.

Neural Networks in Civil Engineering. II: Systems and Ap-plication, Ian Flood and Nabil Kartam, CP Apr. 94,

Neuromodex--Neural Network System for Modular Construction Decision Making, Mirza B. Murtaza and Deborah J. Fisher, CP Apr. 94, p221-233.

A Process-Oriented Planning and Control Model for Computer-Integrated Construction, Tarek M. Attia and Leonhard E. Bernold, (Computing in Civil Engineering, Khalii Khozeimeh, ed., 1994), p1756-1763. Quality Management of Earthwork Using Knowledge-

based Systems, Shrinath J. Kotdawala and Imad A. Basheer, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p426-429.

Some Applications of Neural Networks in Structural Engineering, Jamshid Ghaboussi, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p25-36.

Do We Need More Waterbird Nesting Islands in Galveston Bay, Texas? (and if so, how and where do we build them?), Phil Glass, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p796-809.

Dredged Material Disposal and Migratory Birds, Les E. Weigum, (Dredging '94, E. Clark McNair, Jr., ed., Weigum, (Dredging

1994), p1380-1387.

Enhancing Habitat at an Onshore Dredge Disposal Site, Gary W. Oates, William J. Silva and Gregory P. Mailho, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1461-

Marine Recreation Project of the City of Yokohama - Marine Park and Hakkei Island -, Tohru Yano, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p577-586.

Artificial recharge

Artificial Recharge of Aquifers, Charles L. Joy, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p376-383

Management of Recharge Dams in Saudi Arabia, Fouad F. Al-Muttair, Uygur Sendil and Abdulaziz S. Al-Turbak, WR Nov. Dec. 94, p749-763.

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Anatomy of Best Estimate, Leo R. Beard, HY June 94, p679-692. ASCE Honors Its Own at Awards Ceremony during Na-

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Engineers and Managerial Challenges: A Transitional Perspective, M. Ali Porbahaie, CE June 94, p73-74.
Future Trends and Needs in Hydraulics, Daryl B. Simons,

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ASCE GUIDE for Design of Guyed Transmission Structures, Alain H. Peyrot, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p613-617. ASCE Investigators Take a Look at Los Angeles' Lifelines in Earthquake's Aftermath, NE Apr. 94, p2-3.

Balancing Water Allocation and Water Quality: The Model

State Water Code, Ken C. Hall, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p469-472.

Evaluating Activated Sludge Secondary Clarifier Performance: A Protocol, E. J. Wahlberg, M. Augustus, D. T. Chapman, C. Chen, J. K. Esler, T. M. Keinath, D. S. Parker, R. J. Tekippe and T. E. Wilson, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p209-216.

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grams, Hands L. Origgs, Jr. L. Apr. 24, 178-211.

A Performance Goal-Based Seismic Design Philosophy for Waste Repository Facilities, Quazi A. Hossain, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2266-2221. 2271.

ASCE Conferences

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ASCE Employment Conditions
ASCE 1993 Salary Survey, ASCE Committee on Employment Conditions of the Professional Practice Division, EI Apr. 94, p221-230.

ASCE Salary Survey 1993, Committee on Employment Conditions of the Professional Practice Division of the American Society of Civil Engineers, (D. Wayne Klotz, chmn.), 1994, 0-87262-893-0, 66pp.

ASCE Ethics

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ASCE Publications

1994 Election Ballot to be Included in July Newspaper, CE June 94, p75.

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ASCE Annual Combined Index - 1993, ISSN: 0742-1753, American Society of Civil Engineers, Publications Division, 1994, 0-87262-851-5, 1055pp.

ASCE Board, in Atlanta, Gives Go-Ahead for Exploring Possibility of Electronic Textbook; Takes Further Steps for Headquarters Relocation, NE Dec. 94, p1,10. ASCE to Launch High-Tech Newsletter, CE Mar. 94, p8.

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Design Basis for Creep in Composites Structures, Richard E. Chambers and Ayman S. Mosallam, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p265-271.

Emerging Technology Newsletter Debuts, CE June 94, p8. Engineers' Salaries: It's Not What You Do, but where You Do It that Counts, NE Apr. 94, p15.

Face to Face, WP Special issue 94, p5.
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Transactions of the American Society of Civil Engineers 1993, American Society of Civil Engineers, (Publications Division, chmn.), 1994, 0-87262-828-0, 760pp.

ASCE Sections

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Ash disposal system of Ash: An Innovative Approach to Sludge Management, Michael E. Manning, John R. Amend and Mark K. Ballerstein, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p146-153.

Cementing Action in Non-Portland Cement Systems: Sulpho-Pozzolanic and Silico-Pozzolanic Reactivity, R. T. Hemmings and E. E. Berry, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p329-336.

Characterization and Use of Fluidized-Bed-Combustion Coal Ash, Christina B. Behr-Andres and Neil J. Hutzler,

EE Nov./Dec. 94, p1488-1506.

Thermoplastic Stabilization of MSW Combustor Ash, Vincent T. Breslin and Shawn E. Tisdell, EE Jan./Feb. 94, p154-168.

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Microtunneling Techniques to Form an Insitu Barrier Around Existing Structures, Philip J. Coller and David G. Abbott, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p386-394.

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Asphalt Portland Cement Concrete Composite: Laboratory Evaluation, I. L. Al-Qadi, H. Gouru and R. E. Weyers, TE Jan./Feb. 94, p94-108.

Behavior of AC-20P Versus AC-30 Asphalt Concrete Mixtures, Peter Sebaaly, Imran Farooq and Jon Epps, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1059-1079.

D. Bashani, ed., 1994), p1039-1079.
Fatigue Cracking and Rutting in Flexible Pavements, D. V. Ramsamooj, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y.

Liang, ed., 1994), p132-146.
Use of Gel-Permeation Chromatography in Predicting Properties of Asphalt, Norman W. Garrick, MT Aug. 94,

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Utilization of Phosphogypsum-Based Slag Aggregate in Portland Cement and Asphaltic Concrete Mixtures, Paul T. Foxworthy, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p75-85

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Alabama DOT Implementation of Hot Mix Asphalt QC/QA Procedures, Frazier Parker, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1026-1033.

Case Study of Modified Bituminous Mixtures: Somerset, Kentucky, Amy L. Simpson and Kamyar C. Mahboub, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p88-96.

Evaluating the Use of Waste Materials in Hot Mix Asphalt, Dale S. Decker, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1042-1050.

Fundamental Properties of Asphalt Rubber Blends, Wil-liam H. Daly, Louay N. Mohammad, Ioan Negulescu, Harold R. Paul and Jeffrey Youngblood, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p425-431.

Kentucky's Experience with CRM-HMA, Kamyar C. Mahboub, Karen A. Sizemore, Robert D. Bosley and Philip A. Creamer, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p432-440.

Laboratory Performance of Quartzite Based Stone Matrix Asphalt Mixtures (SMAM), Ali A. Selim, Ramzi Taha and Fouad Bayomy, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p635-

Large-Stone Aggregate-Modified Asphalt Mixes, Murari Man Pradhan and Joseph D. Armijo, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham,

ed., 1994), p627-634.

A Look at the Superpave Level 1 Mix Design Process, R. Michael Anderson and Robert B. McGennis, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p880-887.

Mechanical Properties of Stone Mastic Asphalt, M. N. Partl, T. S. Vinson and R. G. Hicks, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed.,

1994), p849-858.

Modeling Viscoelastic Behavior of Hot Mix Asphalt (HMA) Using Discrete Element Methods, Jay Namunu Meegoda and K. George Chang, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p804-811.

Modification of Asphalt Binders: A Critical Evaluation Using the New SHRP Methods, H. U. Bahia, (Infrastructure: New Materials and Methods of Repair, Kim D.

Basham, ed., 1994), p859-879.

Modified Asphalt Binders - How Do They Compare? Ran-dy C. Ahlrich and Gary L. Anderton, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p64-74. Modified Asphalts Tested in Pavement, CE Feb. 94, p8

Montana Experience with Polymer Modified Asphalt, Mu-rari Man Pradhan and Joseph D. Armijo, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p311-318.

Performance Evaluation of Crumb-Rubber Modified Asphalt Interlayers, Olga Pendleton and Cindy Estakhri, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p441-448. Relationship of SHRP Binder Test, Frank Fee, (Infrastruc-

ture: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p114-122.

Rheological Characterization of Asphaltic Mixtures Under Repetitive Loading, Y. R. Kim and Y. C. Lee, (Infra-structure: New Materials and Methods of Repair, Kim

D. Basham, ed., 1994), p796-803.
Rheological Evaluation of Engineered Asphalt Binders, H. U. Bahia and N. I. Kamel, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994),

Texas Asphalt Mix: Greater Strength, Less Filling, ET

June/July 94, p7.
The Use of Crumb Rubber Modifier in Hot-Mix Asphalt, Mark S. Buncher and E. R. Brown, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p53-63.

Use of Low Density Polyethylene to Modify Asphalt Mixtures, Fouad M. Bayomy and Glenn D. Carraux, (Infrastructure: New Materials and Methods of Repair, Kim

D. Basham, ed., 1994), p303-310.

The Use of Recyclable Waste Materials in Hot Mix Asphalt Concrete Highway Pavements, Stanley K. Ciesielski, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p327-335.

Utilization of Phosphogypsum-Based Slag Aggregate in Portland Cement and Asphaltic Concrete Mixtures, Paul T. Foxworthy, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p75-

Asphalt pavements
Advancement of Material Handling Technologies for In-Place Asphalt Pavement Recycling, Sotiris A. Pagdadis and Ilan Ishai, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p365-373.

Asphalt Applications for Railroad Maintenance and Con-struction, Jerry G. Rose, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994),

p617-626.

Asphalt Pavement Temperature Related to Arid Saudi Environment, H. I. Al-Abdul Wahhab and F. A. Balghunaim, MT Feb. 94, p1-14.

Asphalt Rubber a Federal Perspective, Joseph Massucco, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p467-474.

Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994, 0-7844-0029-6, 220pp. Comparison of Nuclear and Core Pavement Density Measurements, Steve R. Sanders, Debasis Rath and Frazier

Parker, Jr., TE Nov./Dec. 94, p953-966. Densification of Asphalt Pavements by Traffic, Charles R.

Foster, (Airport Pavement Innovations-Theory to Practice, Jim W. Hall, Jr., ed., 1993), p164-180.

Effect of Testing Variability on Contractor Payment for Asphalt Pavements, Serii N. Amirkhanian, James L. Burati, Jr. and Harish C. Mirchandani, CO Sept. 94,

A Look at the Superpave Level 1 Mix Design Process, R. Michael Anderson and Robert B. McGennis, (Infrastructure: New Materials and Methods of Repair, Kim D.

Basham, ed., 1994), p880-887.

Modified Asphalts Tested in Pavement, CE Feb. 94, p8. Sheet Flow Resistance of Asphaltic Pavements, Joseph R. Reed, John C. Warner and Richard S. Huebner, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1100-1104.

The Use of Recyclable Waste Materials in Hot Mix Asphalt the Use of Recycladie Waste Materials in Hof Mix Asphalt Concrete Highway Pavements, Stanley K. Ciesielski, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p327-335.

Asphalts

Analytical and Experimental Analyses of Fatigue Crack Propagation in Asphalt Concrete Overlays, R. Ballarini, G. C. Ferrante and J. L. Figueroa, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p978-983.

Comparison of Unconfined- and Confined-Creep Tests for Hot Mix Asphalt, E. R. Brown and Kee Y. Foo, MT May

94, p307-326.

Densification of Asphalt Pavements by Traffic, Charles R. Foster, (Airport Pavement Innovations—Theory to Practice, Jim W. Hall, Jr., ed., 1993), p164-180.

Dynamic Linear Back Calculation of Pavement Material Parameters, Jacob Uzan, TE Jan./Feb. 94, p109-126.

Dynamic Pavement-Strain Histories from Moving Traffic

Dynamic Pavenier Staff, Raj Siddharthan and Peter E. Sebaaly, TE Sept./Oct. 94, p821-842. Effects of Crumb Rubber Type and Content on Performance Related Properties of Asphalt Binders, H. U. Bahia and R. Davies, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p449-

Performance of Fuel-Resistant Sealers for Asphalt Concrete Pavements, James E. Shoenberger, MT Feb. 94,

p137-149.

The Use of Crumb Rubber Modifier in Hot-Mix Asphalt, Mark S. Buncher and E. R. Brown, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p53-63.

Assessment and Upgrade of an Older Transmission Line, Robert O. Kluge and Alain H. Peyrot, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., gress XII, N. C. 1994), p607-612.

1994), p007-012.

Assessment of Rock Bolt Systems for Underground Waste Storage, Wesley T. Leedy and Robert J. Watters, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p691-695.

An Assessment of the Joint Factor as Used in the Modified

MEXE Method, N. G. Gong and B. S. Choo, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p704-711.

m Safety Issues Related to Urban Detention Ponds, James E. Alverson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry

N. Tuvel, ed., 1994), p714-717.

EPA's Public Consultation and Communications Needs Assessment for Its WIPP Outreach Program, Amy M. Newman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p88-91.

Hills, Charles R. Vojislav Banjac and A. Sharif Heger, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p671-678

Intelligent Renewal Keeps Infrastructure Civil, CE Mar. 94, p6.

Liquefaction in Silty Soils: Design and Analysis, W. D. Liam Finn, R. H. Ledbetter and Guoxi Wu, (Ground Failures Under Seismic Conditions, Shamsher Prakash,

ed. and Panos Dakoulas, ed., 1994), p51-76.
Liquefaction of Silty Soils, Y. P. Vaid, (Ground Failures
Under Seismic Conditions, Shamsher Prakash, ed. and

Panos Dakoulas, ed., 1994), p1-16.

Robust EBS Design and Source-Term Analysis for the Partially Saturated Yucca Mountain Site, Mick Apted, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p485-490.

Sustainable Management of Existing Reservoirs, Slobodan P. Simonovic, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuv-

el, ed., 1994), p242-245.

Thoughts of Reservoir Management Studies, Morris Israel, Kenneth W. Kirby and Jay R. Lund, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p238-241.

Mars Terraformation Revisited, Joseph Guarascio, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994),

p774-781.

A Remote Sensing Evaluation of Lunar Pyroclastic Deposits, B. Ray Hawke and Cassandra R. Coombs, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1008-1019.

Resource Recovery Facilities for Earth Approaching Com-ets, Thomas C. Taylor, Anthony C. Zuppero and Lucy-Ann McFadden, (Engineering, Construction, and Oper-ations in Space IV, Rodney G. Galloway, ed. and Stan-ley Lokaj, ed., 1994), p562-571.

A Space Station of Mars, Kimberly Butler, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p787-792.

Terrestrial Analogs: Implications for Lunar Lava Tubes, Cassandra R. Coombs and B. Ray Hawke, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1138-

Update of the Implications of Recent Space Resource Dis-covery, Anthony Zuppero and Pat Whitman, (Engineer-ing, Construction, and Operations in Space IV, Rodney Galloway, ed. and Stanley Lokaj, ed., 1994), p532-

541

Development of a High Resolution Spectrometer for Meas-uring the Near-Earth RFI Environment: The First Auto-Correlator in Space, Namir E. Kassim, Kurt W. Weiler Correlator in Space, Namin E. Rassini, Kuti W. weller and Andrew W. Clegg, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1410-1421.

Dust Levitation on the Moon, Frederick A. Slane, Nebojsa Duric and Jack O. Burns, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p897-906.

Effects of Dust and Thermal Cycling on Telescope Mirror Performance, Koon Meng Chua, R. Eric Pease and Stewart W. Johnson, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p916-932.

Gravitational Wave Astronomy and the Lunar Ligo Concept, Norman LaFave and Thomas L. Wilson, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1442-

1451.

1431.
1431.
An Inflatable Antenna for Space-Based Low-Frequency Radio Astronomy, John P. Basart, Shreekanth A. Mandayam and Jack O. Burns, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1390-1399.
Inter-stellar Propulsion: The Need for Speed, William R. Chatterion, and Operations.

Claycomb, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p737-746.

Low Frequency Radio Astronomy from Earth or Lunar Orbit, Jack O. Burns, John P. Basart and Bernard M. McCune, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1400-1409.

The Lunar Ultraviolet Telescope Experiment (LUTE), John D. Hilchey and Max E. Nein, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1431-1441.

Resource Recovery Facilities for Earth Approaching Comets, Thomas C. Taylor, Anthony C. Zuppero and Lucy-Ann McFadden, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p562-571.

A Study of Communication Signal Leakage Through the Starth's Ionosphere Using Ray-Tracing Techniques, M. McCoy and J. P. Basart, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p553-561.

An Ultra-Lightweight Advanced Technology Telescope for Space Applications, P. C. Chen, R. J. Oliversen, H. Hojaji, W. K. Chu and T. L. Wilson, (Engineering, Con-struction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1422-1430.

Update of the Implications of Recent Space Resource Discovery, Anthony Zuppero and Pat Whitman, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p532-

541

Very Low Frequency Radio Astronomy from Lunar Orbit, Nebojsa Duric and Jack O. Burns, (Engineering, Con-struction, and Operations in Space IV, Rodney G. Galstruction, and Operations in Space IV, Rodney G. Giloway, ed. and Stanley Lokaj, ed., 1994), p1382-1389.

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Asymmetric Flow into Well by Finite Elements, Kamala K. Singh and Shambhu P. Dasgupta, IR May/June 94, p520-533.

Experimental Study of Three-Dimensional Wave Breaking K. She, C. A. Greated and W. J. Easson, WW Jan./Feb.

94, p20-36.

Hydrodynamic Processes on the Lower Shoreface of the Dutch Coast, Piet Hoekstra and Klaas T. Houwman, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p852-

Modified Eddy Viscosity Model in Fully Developed Asym-metric Channel Flows, Whey-Fone Tsai and Robert Ette-

ma, EM Apr. 94, p720-732

Velocity Measurements in Asymmetric Turbulent Channel Flows, R. N. Parthasarathy and M. Muste, HY Sept. 94, p1000-1020.

Asymptotic series

Second Order Irregular-Wave Generation in Flumes Computation of Transfer Functions by an Asymptotic Summation Method, Hemming A. Schäffer, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p784-797.

Atmospheric diffusion

A-Tough: A Multimedia Fluid-Flow/Energy-Transport Model for Fully-Coupled Atmospheric-Subsurface Inter-actions, Parviz Montazer, Dale Hammermeister and Joseph Ginanni, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2333-2340.

Atmospheric Transport Prediction Using an Adaptive Finite Element Method, Darrell W. Pepper and Ashley F. Emery, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1946-1952.

Atmospheric pressure

Atmospheric Pressure within Lunar Structure, Paul S. Nowak, Jeffrey Janakus and Charles E. Mitchell, AS Oct. 94, p398-410.

Attenuation

Attenuation Functions Compared to 6/29/1992 Little Skull Mountain Earthquake Motion, Renner B. Hofmann and Abou-Bakr K. Ibrahim, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2402-2408.

Atterberg limits

Effect of Material Properties on Compactability and Bear-ing Capacity, Chris J. Semmelink and Alex T. Visser, TE July/Aug. 94, p570-589.

The Effect of Mobile Transporter Motion on the Space Sta-tion Attitude Control System, Tsay-Hsin G. Hu, Jalal Mapar and Ben C. Barker, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p453-462.

Industrial Facility Quality Perspectives in Owner Organizations, Kelly Jean Fergusson and Paul Teicholz, CF May

Interactions Between the Space Station Freedom Attitude Control System and Space Shuttle Remote Manipulator Controller During On-Orbit Assembly Operations, James T. Kaidy, Jalal Mapar and Ben C. Barker, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p433-452.

Organizational Attitudes of Senior Professionals, George Bennett and John Whittaker, ME May/June 94, p35-40.

Public Perceptions of Fresh Water Issues, Robert E. O'Connor, Richard J. Bord and Ann Fisher, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p155-174.

Construction Facilities Audit: Quality System-Performance Control, Allan F. Samuels, ME July/Aug. 94, p60-65.

Review of Postconstruction Evaluation Procedures for Infrastructure Projects, Yuzo Akatsuka, ME Jan./Feb. 94,

Utilizing Coordinated Billing and Metering Systems Anal-ysis to Enhance Utility Revenue on a Shared Revenue Basis, Randy P. Schuler, (Revenue Enhancement for Water and Wastewater Systems, Jerry R. Rogers, ed. and William P. Bullock, Jr., ed., 1994), p15-23.

Building Code of Australia Expert Assistant - Putting Re-search into Practice, Ron Sharpe, Stephen Oakes, Philip Haselden and Ian Davidson, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1679-1686.

Climate Change, Jim Lambert, (), p352-354.

Environment-Irrigation Trade-Offs and Risks, Norman J. Dudley, (Risk-Based Decision Making in Water Re-sources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p280-294

Modeling of Deep Water Outfall Plumes in the East Australian Coastal Ocean, Ian P. King, William L. Peirson and Bruce A. Cathers, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p71-85.

Some Aspects of Compression Member Design in Australia, Murray J. Clarke and Russell Q. Bridge, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p1587-1592.

Some Lessons from Australian Experience, George R. Walker, (Hurricanes of 1992: Lessons Learned and Im plications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p249-258.
Sustainable Competitive Advantage for Project-Management Consultants, Martin Betts, ME Jan/Feb.

94, p43-51.

US Hurricanes of 1992 an Australian Perspective, Greg Reardon and Doug Meecham, (Hurricanes of 1992: Les sons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p642-651.

Auto-regressive moving-average model

Effectiveness of Water-Conservation Measures in Greater Athens Area, Helen Briassoulis, WR Nov./Dec. 94,

Autocorrelation

New Crack-Imaging Procedure Using Spatial Autocorrela-tion Function, H. Lee and H. Oshima, TE Mar./Apr. 94, p206-228.

Automatic identification systems Commercial Vehicle Operations and Automatic Vehicle Identification Applications at Airports, M. Allen Hoffman and Emily Van Wagner, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p162-173.

Computer Vision System for Automatic Vehicle Clasraf, TE Nov./Dec. 94, p861-876.

Managing Traffic With Real-Time Transponders, Richard

W. Doering, CE Sept. 94, p68-69.

W. Doering, C.B. Sept. 94, 1906-094. Robotic Workcell for Waste Handling, Gregory P. Starr, Gregory W. Donohoe, David Wilson and Raghu Ko-palle, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p347-355.

Automation

Application of Virtual Reality to Space Robotics Opera-tions, David A. Read, Ken J. Ruta and Bradley N. Bell, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p19-27.

Applications of Artificial Intelligence Techniques to Component-Based Modular Building Design, C. Bridgewater

and B. L. Atkin, CP Oct. 94, p469-488.

An Artificial Neural Network Approach to Allocating Con-struction Resources, Abdullah M. Alsugair and David Y. Chang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p950-957.

Automated Field Irrigation System Using Side Weirs, R. Singh and T. Satyanarayana, IR Jan./Feb. 94, p48-59.

Automated Sensor Tester, Dave Hayward, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p158-165.

Automatic Truss Design by Optimized Growth, William Keith Rule, ST Oct. 94, p3063-3070.

Automatic, Remote, Multiplexed Geotechnical Measurements with Time Domain Reflectometry (TDR), Charles H. Dowding and Fei-chiu Huang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1220-

Automation and Robotics Opportunities: Construction Versus Manufacturing, John G. Everett and Alexander H. Slocum, CO June 94, p443-452.

Automation Concepts for In-Situ Waste Containment, Larry Banta and David Martinelli, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p448-456.

Beam-Buckling Analysis via Automated Rayleigh-Ritz Method, C. M. Wang, L. Wang and K. K. Ang, ST Jan.

94, p200-211.

Bechtel Automated Lift Planning System, Craig Bennett and Steve Ditlinger, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p401-409.

Bubba, A Teleoperated Countermine Vehicle, Dave Hay-ward, Bryan Pletta, Jerry Clifford and Kerry Habiger, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p464-473

CAD-Based "Intelligent" Drawings: An Automated Quality Control Approach to Land Development, Charles McIn tyre, Kevin Parfitt and Matt Syal, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p547-554.

Canal-Control Needs: Example, A. J. Clemmens, G. Sloan and J. Schuurmans, IR Nov./Dec. 94, p1067-1085.

Chicago Automates Expressway Lanes, Rita Robison, CE Sept. 94, p52-55.

Circle Integration, John Kunz, Mark Clayton and Martin Fischer, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p55-62.

Comparison of Traditional and Neural Classifiers for Pavement-Crack Detection, Mohamed S. Kaseko, Zhen-Ping Lo and Stephen G. Ritchie, TE July/Aug. 94, p552-569.

Computer Automation and Project Organizational Impact: A Conceptual Model, Stuart Anderson and Suresh Ketha, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p498-501.

Computer Use in Claims Analysis -- Roundtable Discussion, John R. Knoke, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2136-2139.

Computer-Assisted Coal Mining — An Overview, George H. Schnakenberg, Jr., (Robotics for Challenging Envi-ronments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p427-436.

Conceptual Design and Characteristics of A Dual-Arm Cam-Lock Manipulator, Ali Meghdari, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and

Paul R. Klarer, ed., 1994), p140-148.

Construction Process Innovation Through SMART System, Yusuke Yamazaki and Junichiro Maeda, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1583-1590.

Construction Robot Force Control in Cleaning Operations, Y. Zhou and M. J. Skibniewski, AS Jan. 94, p33-49.

A Decision Support System for Evaluating the Suitability of a Robotics System for a Construction Project, Makarand Hastak, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p507-514.

Decision-Support System for Long-Range Stream Flow Forecasting, Michael Bender and Slobodan P. Simono-vic, CP Jan. 94, p20-34.

Demands and Satisfiers for Automation and Robotics in Construction: Differences Between Japan and the United States, Hiroshi Saito and John G. Everett, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p419-426.

Developing Plans for Robotic Excavators, Sanjiv Singh, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p88-96.

Dynamic-Behavior Modeler for Material Handling in Con-struction, Yvan J. Beliveau and Taylan Dal, CP July 94, p269-285.

Emission Impacts of Intelligent Vehicle Highway Systems, Simon Washington, Randall Guensler and Daniel Sperling, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p118-138.

ESPADD.BR: Expert System Producing Automated Designs and Drawings for Bridges, Charles Tung and Louis Berger, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p913-921.

Feasibility Analysis of Automated Material Handling for Hazardous Waste Remediation, Andrew F. Griffith, Carl T. Haas and Richard L. Tucker, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p338-346. How to Organize CADD Systems (Part 3), John Voeller, CC Apr. 94, p6-7.

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Human Extender: A Material Handling System, H. Kaz-erooni, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p37-43.

Integrated Automation Systems in Structural Engineering Song Fong Jan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1318-1325. An Integrated Computer Model for Project Schedule Up-

dating, Walid Y. Thabet and Ayman A. Morad, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p743-750.

The Integrated Systems Approach to Facilities Management, Robert A. Snodgrass, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2199-2207.

Intelligent Construction Planning, A. Warszawski and O. Shaked, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p972-979.

Kinematics of Excavators (Backhoes) for Transferring Surface Material, A. J. Koivo, AS Jan. 94, p17-32.

Machine learning Applications for Automated Constructa-bility Reviews, Kamolwan Lueprasert and Miroslaw J. Skibniewski, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p893-900.

Machine Learning of Design Rules: Methodology and Case Study, Tomasz Arciszewski, Eric Bloedorn, Ryszard S. Michalski, Mohamad Mustafa and Janusz

Wnek, CP July 94, p286-308.

A New Automated System for Decision Support in the Construction Industry, M. J. Riley and C. J. Pickering, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p523-530.

A New Robotic System Concept for Automating Highway Maintenance Operations, S. E. Winters, D. Hong and S. A. Velinsky, (), p374-382.

The Optimal Selection of Robot Modules for Space Manipulators, Robert Ambrose and Delbert Tesar, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p239-249.

A Process-Oriented Planning and Control Model for Computer-Integrated Construction, Tarek M. Attia and Leonhard E. Bernold, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1756-1763.

Progression of Computer Applications in Water Supply and Distribution Systems, Chun-Hou Orr, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p622-629

A Real-Time Control Network for Robotic Mining, William H. Schiffbauer, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p437-447

Requirements for Applications of Robotics and Automation in Highway Maintenance and Construction Tasks, B. Ravani, S. A. Velinsky and T. H. West, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p356-364.

Robot for Interior-Finishing Works in Building: Feasibility Analysis, Abraham Warszawski and Yechiel Rosenfeld,

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Robotics and Automation for Environmental Screening and Characterization, Kelly R. Tilford, Edward W. Jaselskis, Marvin S. Anderson and Ralph E. Patterson, III, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p329-337.

Robotics for Challenging Environments, Laura A. Dem-setz, ed. and Paul R. Klarer, ed., 1994, 0-87262-913-9,

490pp.

Role of Advanced Computer Technology in Construction Industry, Roger M. Henry, CP July 94, p385-389. Sensing and Control for Robotic Masonry, Rami A. Rihani

and Leonhard E. Bernold, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p410-418. Sewers and Computers, Rodolfo B. Fernandez and Brian

W. Daniels, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p836-842.

Ship Fabrication Innovations (Naval & Commercial), Raymond H. Juers and Kevin Lynaugh, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p344-350.

Silent Inspector - An Aid to Dredge Inspection, James Rosati, III and Timothy L. Welp, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p756-763.

Statistical and GIS Tools for Assessing Water Conservation Effects, Pen C. Tao, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p416-419.

Systems-Level Evaluation of Automated Urban Freeways, Robert A. Johnston and Raju Ceerla, TE Nov./Dec. 94,

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Tonnes Dry Solids Reviewed, Robert C. Rullens, Kees d'Angremond and Gerard Ottevanger, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p673-682.

An Update on Dredge Instrumentation and Automation, Arie Korevaar, (*Dredging '94*, E. Clark McNair, Jr., ed., 1904), 2764-278.

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Recent Advances in Biaxially Loaded Columns, ASCE-ACI Committee 441, Subcommittee on Biaxially Loaded Columns, (Hsu, C. T. T., chmn.), (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p450-454.

Seismic Shear Strength of Reinforced Concrete Columns, M. J. Nigel Priestley, Rayindra Verma and Yan Xiao, ST

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Structural Tests on the "Suspen-Dome" System, Mamoru Kawaguchi, Masaru Abe, Tatsuo Hatabo, Ikuo Tatemichi, Satoshi Fujiwara, Hiroaki Matsufuji, Hiroyuki Yoshida and Yoshimichi Anma, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p383-392.

Experimental Study on a Buckling Behavior of a Wooden Single-Layer Space Frame of Reticular Shell on a Hexagonal Plan: Influence due to the Bolted Joint Looseness with Axial and Bending Resistance, Kouichi Matsuno and Shigeru Aoki, (Spatial, Lattice and Tension Struc-tures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p152-161.

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Axisymmetric Plastic Plates with Ring Supports at Opti-mum Locations, C. M. Wang, S. K. Ting and W. A. M. Alwis, EM Feb. 94, p400-407.

Cone-Cylinder Intersection under Pressure: Axisymmetric Failure, Jin-Guang Teng, EM Sept. 94, p1896-1912.

Convergence Rates of the Method of Successive Elastic Solutions in Thermoplastic Problems of a Layered Concentric Cylinder, Todd O. Williams and Marek-Jerzy Findera, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p348-357.

Large Deformation Analysis of Plates on Unilateral Elastic Foundation, A. A. Khathlan, EM Aug. 94, p1820-1827.

Parametric Study of Axisymmetric Circular-Glass Plates, C. V. Girija Vallabhan, Y. C. Das and Manjunatha Ramasamudra, ST May 94, p1663-1671.

Azimuth

Determination of Look Angles to Geostationary Communi-cation Satellites, Tomás Soler and David W. Eisemann, SU Aug. 94, p115-127.

Backfills

Geogrids Help Solve Capitol's Gridlock, CE Dec. 94, p84.
Passive Earth Pressures with Various Wall Movements,
Yung-Show Fang, Tsang-Jiang Chen and Bin-Ferng
Wu, GT Aug. 94, p1307-1323.

Racine's Water Street Retaining Wall, Steven W. Hunt, Randy L. Frank, Paul A. Tarvin and James J. Blazek, (Serviceability of Earth Retaining Structures, Richard J.

Finno, ed., 1994), p137-154.

Robust EBS Design and Source-Term Analysis for the Partially Saturated Yucca Mountain Site, Mick Apted, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

Wando Terminal Ground Improvement Program, James Drew Hussin and Forrest Foshee, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1416-1425.

Kinematics of Excavators (Backhoes) for Transferring Surface Material, A. J. Koivo, AS Jan. 94, p17-32.

Characterisation of Anhydrous Cement Clinker by Backscattered Electron Imaging and Energy Dispersive X-Ray Analysis, K. L. Scrivener, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p79-81.

Backwashing Filtration and Backwashing Performance of Biologically-Active Filters, A. Amirtharajah, Rasheed Ahmad, A. Al-Shawwa and P. M. Huck, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p178-185.

Sand Filter Backwast Pit Criticality Analysis, Hans Toffer and David G. Erickson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p907-912.

Backwater

Effect of Bridge Pier Shape and Contraction Ratios on Backwater Profile, Sabah Al-Nassri, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p563-568. Improved Hydraulic Features of the HEC River Analysis

Improved Hydraulic Features of the HEL, River Analysis (HEC-RAS), Gary W. Brunner and Steven S. Piper, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p502-506. Jet Flow on Stepped Spillways, M. R. Chamani and N. Rajaratnam, HY Feb. 94, p254-259.

Racteria

Bacterial Density Changes Across Sludge Disposal Facili-ty, Ling Cheng, Bret Buras, D. M. Griffin, Jr. and James D. Nelson, EE Jan./Feb. 94, p138-153.

Biodegradation of Phenanthrene in Sand Columns in the Presence of Nonionic Surfactants, David Norris and Tariq Ahmed, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p360-367.

Biological Colonization of Granular Activated Carbon Filters in Drinking-Water Treatment, Pierre Servais, Gilles Billen and Pascale Bouillot, EE July/Aug. 94, p888-899.

Chemical Inactivation of Cryptosporidium Parvum in Drinking Water, Gordon R. Finch and E. Kathleen Black, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p42-49.

Cryptosporidium and the Milwaukee Incident, Kim R. Fox and Darren A. Lytle, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare

Edwards, ed., 1994), p50-57.

Effect of Aggregation on Vibrio Cholerae Inactivation, Robert M. Clark, Eugene W. Rice, Bennett K. Pierce, Clifford H. Johnson and Kim R. Fox, EE July/Aug. 94, n875-887.

Kinetics of Ozone Disinfection in Completely Mixed System, Hongde Zhou and Daniel W. Smith, EE July/Aug. 94, p841-858.

Performance Evaluation of Ceramic Filter Candles, Malay Chaudhuri, Sanjeev R. Verma and Anirban Gupta, EE Nov./Dec. 94, p1646-1651.

Reservoir Operation Using Bayesian Inferencing and Bal-ancing Rules, Emmanuel U. Nzewi, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p173-176.

Selfects on River Mechanics Due to Reduction in Low-Season Discharge, E. V. Richardson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), pl 15-119.

Estimation of Design Surge Heights by Utilizing Meteoro-logic and Oceanographic Data, Jahir Uddin Chowdhury and A. K. M. Tareque, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p918-922.

Farakka Barrage - It's Impacts and Possible Mitigation, M. Asafuddowlah and Sufian A. Khondker, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p120-124.

Groundwater Development and Related Issues, Abdul Hannan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p308-311.

Impacts of Low Flows on the Alluvial Rivers of the Southwest Region of Bangladesh, Daryl B. Simons, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p125-129.

Bank erosion

Boundary Shear in the Vicinity of River Banks, Donald W. Knight and Shuyou Cao, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p954-958.

Field Evaluation of the Sediment Transport Model "Stream" with a Bank Erosion Component, Deva K. Borah and Mona S. Dashputre, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p979-983.

Mathematical Models to Assess Stream Dynamics, Laura Bittner, Yarko Niño and Marcelo García, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p391-395.

A Physically-Based Model of Channel Widening, Stephen E. Darby and Colin R. Thorne, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p944-948.

Toe Scour Protection Methods, Stephen T. Maynord, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1035-1039.

Bank stabilization

Equilibrium Geometry of Channels with Cohesive Banks, R. G. Millar and M. C. Quick, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p964-968.

Instream and Streambank Environmental Feature Guidelines, J. Craig Fischenich, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p406-410.

Mathematical Models to Assess Stream Dynamics, Laura Bittner, Yarko Niño and Marcelo García, (*Hydraulic En-gineering* '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p391-395.

Sandstone Materials Used as Riprap, Steven R. Abt, Mitchell R. Peters, Terry L. Johnson and Scott A. Hogan, (Hydraulic Engineering) '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p467-471.

Toe Scour Protection Methods, Stephen T. Maynord, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1035-1039.

'A' for Alabama, 'B' for Barge and 'E' for Engineering Hall of Fame, NE May 94, p14.

Barges

Temporal and Spatial Variations of Suspended Sediment Concentration during Navigation Traffic in a Natural River, Renjie Xia, Ta Wei Soong and Nani G. Bhowmik, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1131-1135.

Velocity and Turbulence Measurement from the Illinois and Mississippi Rivers, Ta Wei Soong and Nani G. Bhowmik, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p62-75.

Robust EBS Design and Source-Term Analysis for the Par-tially Saturated Yucca Mountain Site, Mick Apted, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p485-490.

Barriers

Alternative Approaches to Reliability Modeling of a Multi-ple Engineered Barrier System, Malwane M. A. Ananda and Ashok K. Singh. (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1030-1036.

The Assessment of Future Human Actions at Radioactive Waste Disposal Sites: An International Perspective, D. R. Anderson, D. A. Galson and E. S. Patera, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1286-1291

Automation Concepts for In-Situ Waste Containment, Larry Banta and David Martinelli, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R.

Klarer, ed., 1994), p448-456.

Compliance with NRC Subsystem Requirements in the Repository Licensing Process, Homi Minwalla, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1578-1584.

Core Message from PNC/H-3 and Key Issues for the Next Milestone, Sumio Masuda, Katsuhiko Ishiguro, Mikazu Yui and Tadashi Mano, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1501-1507. DOE Waste Gets Big Chill, ET Oct./Nov. 94, p1,7.

Engineered Barrier Environment, Yucca Mountain, Dale G. Wilder, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1179-1187.

Integrated Modelling of Near Field and Engineered Barrier System Processes, Alan Lamont and James Gansemer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1195-1201.

Kwicklis, Edward M. Alan L. Flint and Richard W. Healy, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p2341-2351.

Methodology of Scientific Investigations for Radioactive Waste Disposal in Geological Formations of Ukraine, D. P. Khrushchov, O. M. Kharitonov and Eu. A. Yakovlev, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1514-1520.

Models for Source Term, Flow, Transport and Dose As-sessment in NRC's Iterative Performance Assessment, Phase 2, Timothy McCartin, Richard Codell, Robert Neel, William Ford, Rex Wescott, John Bradbury, Budhi Sagar and John Walton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1469-1479.

Molluscs as Climate Indicators: Preliminary Stable Isotope and Community Analysis, Saxon E. Sharpe, Joseph F. Whelan, Richard M. Forester and Ted McConnaughey, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p2538-2544.

Multi-Barrier Borehole Canister Designs for a Tuff Reposi-tory, David E. James, Robert L. Skaggs and Sunceta Mohansingh, (High Level Radioactive Waste Manage-ment, High Level Radioactive Waste Program Committee, 1994), p650-657.

Natural Analogues and Performance Assessment, Paul L. Cloke, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1329-1336.

Paper Sludge Can Cap Landfills, ET Dec. 94/Jan. 95, p5.

Performance Assessment of the Copper/Steel Canister, Pa-trik Sellin, Torsten Eng and Lars Werme, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1020-1029.

Removal Of Chromium From Groundwater Using Permeable Barriers: An Aquifer Simulation Study, Mark D. Schmidt and Stephen P. Shelton, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p792-804.

Results from the Kristallin-I Performance Assessment, Paul A. Smith, Piet Zuidema, Ian G. McKinley, Enzo Curti, Ryk A. Klos, Trevor Sumerling and Dan Galson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1648-1654.

Results of Drip Tests of Sludge-Based and Actinide-Doped Glasses, J. K. Bates and E. C. Buck, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p1088-1101.

Status-NRC's QA Overview of the High-Level Nuclear Waste Geologic Repository, William L. Belke and Kenneth R. Hooks, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1716-1721.

Stochastic Analysis of Unsaturated Flow and Transport With the Suflat Executive Numerical Code, Amyrossios C. Bagtzoglou, M. Rashidul Islam and Michael Muller, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2669-2677.

Bars

Bar Yield Penetration in Monotonically Loaded Anchorages, John F. Bonacci, ST Mar. 94, p965-986.

Discrete Modeling of Soil-Structure Interaction Under Dynamic Loading, Grzegorz Bak, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p873-876.

The Impacts of Roughness Bars on the Mixing Processes, Jianlu Xu and Hsieh Wei Shen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p533-537.

Imperfections and Thin-Walled Bars Behaviour, J. B. Obrebski and M. E. El-Awadi, (Spatial, Lattice and Ten-sion Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p310-319.

Macrocell Corrosion of Bent Epoxy-Coated Bars, Khaled Kahhaleh, James Jirsa, Ramon Carrasquillo and Harovel Wheat, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p8-15.

Real-Time Control for a Robotic Rebar Bender, Phillip S. Dunston and Leonhard E. Bernold, (Robotics for Ch lenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p392-400.

Spectral Boussinesq Modelling of Breaking Waves, J. A. Battjes, Y. Eldeberky and Y. Won, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p813-820.

Tests of Yielding Anchorages Under Monotonic Loadings, John F. Bonacci and Jorge Marquez, ST Mar. 94, p987-

Bars, riverine

One- and Two-Dimensional Analysis of Flow in Hotophia Creek, MS, Yafei Jia and Carlos V. Alonso, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p589-594.

Sandbar Formation in Side-Diversion Channels, Vincent Neary, Brian Barkdoll and A. Jacob Odgaard, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1171-1175.

Some Benefits of Grid by Number Sampling, David Crowder and Panayiotis Diplas, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p795-799.

JSC-1: A New Lunar Soil Simulant, David S. McKay, James L. Carter, Walter W. Boles, Carlton C. Allen and Judith H. Allton, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p857-866.

Kinetic Interpretations of First Reactivity Experiments on Lunar Basalt Samples, M. A. Gibson, C. W. Knudsen, D. Lunar Basalt Samples, M. A. Olisson, C. W. Krimssen, J. Brueneman and H. Kanamori, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokasi, ed., 1994), p1167-1177. Lunar Oxygen Production - A Maturing Technology, Carton C. Allen, Gary G. Bond and David S. McKay, (Engineering, Construction, and Operations in Space IV.

neering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994),

p1157-1166.

Mineral Liberation and Beneficiation of Lunar High-Ti Mare Basalt, 71055: Digital-Imaging Analyses, John G. Chambers, Lawrence A. Taylor, Allan Patchen and David S. McKay, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p878-888. Reservoir Estimates for the Sulpicius Gallus Region, Bon-

nie Cooper, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley

in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994b, p889-896.
A Simple Method of Producing Lunar Soil Simulants for Engineering Studies, Koon Meng Chua, Scott Pringle and Stewart W. Johnson, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994b, p867-877.
Sintering Bricks on the Moon, Carlton C. Allen, John C.
Graf and David S. McKay, (Engineering, Construction)

Graf and David S. McKay, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1220-1229.

Evaluation of Drainable Base Courses for Pavements, William P. Grogan, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p693-

Unbound Drainable Base Courses: Permeability Versus Unsurfaced Stability, Reed B. Freeman and Gary L. Anderton, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p685-692.

Base flow

Parameter Regionalization of a Daily Baseflow Runoff Model, Paolo Bartolini and Juan B. Valdés, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p97-101.

Dynamic Interface Shear Strength Properties of Geomembranes and Geotextiles, M. K. Yegian and A. M. Lahlaf, GT May 92, p760-779.

Generalization of Optimal Control Theory: Linear and Nonlinear Control, J. N. Yang, Z. Li and S. Vongchaval-

itkul, EM Feb. 94, p266-283.

Instantaneous Optimal Control of Building Frames, C. C. Chang and Henry T. Y. Yang, ST Apr. 94, p1307-1326. Nonlinear Response of Torsionally Coupled Base Isolated Structure, R. S. Jangid and T. K. Datta, ST Jan. 94, p1-

Optimal Design of Base-Isolated Structures with Dynamic Absorbers, S. C. Sinha and Guangning Li, EM Feb. 94, p221-231

With Base Isolation, You Can't Break City Hall, CE Sept. 94, p14.

Basements, buildingFailures of Residential Building Basements in Ohio, C. F. Diaz, F. C. Hadipriono and S. Pasternack, CF Feb. 94,

Moisture Migration through Basement Walls, Robert W. Day, CF Feb. 94, p82-86.

Two-Dimensional Simulation of Basin Irrigation. I: Theory, E. Playán, W. R. Walker and G. P. Merkley, IR Sept./Oct. 94, p837-856.

Two-Dimensional Simulation of Basin Irrigation. II: Applications, E. Playán, W. R. Walker and G. P. Merkley, IR Sept./Oct. 94, p857-870.

Batch processing
Denitrification Inhibition by High Nitrate Wastes, W. Veydovec, J. Silverstein, N. E. Cook, Jr., L. A. Figueroa, R. Hund and G. D. Lehmkuhl, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p415-422.

Mechanism of Biological Treatment in Plug-Flow or Batch Systems, Hasan Ali San, EE July/Aug. 92, p614-628.

Ozonization of Anaerobic Sludge Dewatering Centrate for Ammonia Removal, K. Ramalingam, V. Diyamandoglu and J. Fillos, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p423-427.

Bathymetry

Boundary Forcing and a Dual-Mode Calculation Scheme for Coastal Tidal Models Using Step-Wise Bathymetry, James K. Lewis, Y. Larry Hsu and Alan F. Blumberg, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p422-431

Bridge Scour During the 1993 Floods in the Upper Missis-sippi River Basin, Gordon G. Barksdale, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p21-25.

Contraction Scour at a Bridge over the Iowa River, Edward E. Fischer, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p31-35.

Disposal Site Capping Management: New Haven Harbor, Thomas J. Fredette, (Dredging '94, E. Clark McNair, Jr.,

ed., 1994), p1142-1151.

ed., 1994), p1142-1151.

Predged Material Accumulation at a Dispersive Disposal
Site, Mary Baker Wiley, Drew Carey, Thomas J.
Fredette and W.F. Bohlen, (Dredging '94, E. Clark
McNair, Jr., ed., 1994), p1172-1181.

Empirical Guidance for Siting Berms to Promote Stability
of Noticity Berns Repetite Edward B. Hande and Deputed

or Nourishment Benefits, Edward B. Hands and Donald T. Resio, (Dredging '94, E. Clark McNair, Jr., ed.,

1994), p220-228

1994), p.2.0-2.28.
GLFSVIEW - GLFS Product Viewing Application, Yi-Fei P. Chu, Chieh-Cheng J. Yen and Keith W. Bedford, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p.207-211.
The Numerical Simulation of Wetting and drying Areas using Riemann Solvers, G. W. Tchamen and R. Kahawit.

ta, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p127-140.

OTF Kinematic GPS Positioning for Vertical Reference Datum, Al Rougeau, Dean Pottle and Larry Rosenbalm, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p288-

294

Prediction of Accretion Below Muhuri Closure Dam in Bangladesh, Mohammad Monowar Hossain and Mohammad Shahabuddin, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1141-1145.

Recent Applications of Acoustic Doppler Current Profilers, K. A. Oberg and David S. Mueller, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p341-350.

Sedimentation and Remediation Aspects of Recreation Lakes, Satya Vasireddy, Ashok Medhi and Anand Prakash, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1136-1140.

Batter piles

Displacement of Batter Piles in Layered Soil, A. S. Yalcin and G. G. Meyerhof, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p975-985.

Bayesian analysis

Bayes' Theorem and Quantitative Risk Assessment, Stan Kaplan, (Risk-Based Decision Making in Water Re-sources VI, Yacov Y. Haimes, ed., David A. Moser, ed.

and Eugene L. Stakhiv, ed., 1994), p186-193. Demand-Driven Operation of Reservoirs Using Uncertainty-Based Optimal Operating Policies, Haralambos V. Vasiliadis and Mohammad Karamouz, WR Jan./Feb. 94, p101-114.

- Reservoir Operation Using Bayesian Inferencing and Balancing Rules, Emmanuel U. Nzewi, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and F.rry N. Tuvel, ed., 1994), p173-176.
- Subjective De-Biasing of Data Sets: A Bayesian Approach, M. Elisabeth Paté-Cornell, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p175-185.

Rave

- Analysis of Bayed Beaches in Static Equilibrium, Soon-Keat Tan and Yee-Meng Chiew, WW Mar./Apr. 94, p145-153.
- Application of WQMAP to Upper Narragansett Bay, Rhode Island, J. C. Swanson and D. L. Mendelsohn, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Betford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p656-678.
- Assessing Effects for Disposal Sites off San Francisco, Peter Hamilton and Allan Y. Ota, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Raph Cheng, ed. and Craig Swanson, ed., 1994), p14-28.
- Assessing the Impact of Channel Deepening in Delaware Bay Through Numerical Modeling, K. W. Kim, B. H. Johnson and J. Gebert, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p29-41.
- Characterization of Circulation and Salinity Change in Galveston Bay, Keh-Han Wang, EM Mar. 94, p557-579.
- Circulation and Flushing in Casco Bay, Maine, Bin Gong and Bryan R. Pearce, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1039-1046.
- Costs and Benefits of Meeting the San Francisco Bay Copper Objective by Regulating Small Treatment Plants, Steven X. McHaney, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1232-1236.
- Development of the Tampa Bay Tidal Current Atlas, Kurt W. Hess, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p489-499.
- An Energy Based Model for Coastal Bays and Lakes, William S. Appleton, William L. Wood and Yan-Sheng Chang, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p565-577.
- A Field and Modeling Study of Residual Circulation in Sarasota Bay and Tampa Bay, Florida, Y. P. Sheng and S. J. Peene, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p641-655.
- The Fleets of San Francisco Crippled by Phony Science, Wm. P. Boland, Jr., (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p162-169.
- Galveston Bay 3D Model Study, Channel Deepening, Circulation, and Salinity Results, R. Berger, W. Martin, R. McAdory and J. Schmidt, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), pl-13.
- Hydrodynamic Modeling of San Diego Bay, Parmeshwar L. Shrestha, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p140-144.
- Identification of A Field Data Collection Program in Delaware Bay, B. H. Johnson, K. W. Kim, T. L. Fagerberg and H. A. Benson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p900-904.

- Influence of Sikes Cut on Apalachicola Bay, FL; A Preliminary Analysis from a Three-Dimensional Perspective, William K. Jones, Boris Galperin, Robert H. Weisberg and T. S. Wu, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p351-365.
- Issues Related to Modeling the Transport of Suspended Sediments in Northern San Francisco Bay, California, Ellen Thomas McDonald and Ralph T. Cheng, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p551-564.
- Modeling the Seasonal Circulation in Massachusetts Bay, Richard P. Signell, Harry L. Jenter and Alan F. Blumberg, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p578-590.
- Non-Point Source Pollution Reduction, J. Thomas Franques and Rhonda L. Townsend, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1252-1256.
- Numerical Model Verification on Tidal Current in Tokyo Bay, Yoshitaka Fukui, Toshio Kodama and Mutsuto Kawahara, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p880-884.
- Regional Optimization of Non-Point Source Load Reduction, J. Thomas Franques and Rhonda L. Townsend, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p262-266.
- San Francisco Bay Test Case for 3-D Model Verification, Peter E. Smith, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p885-889.
- Three Dimensional Modeling of Circulation and Salinity in Mt. Hope Bay and the Lower Taunton River, Wenrui Huang and Malcolm M. Spaulding, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p500-508.
- Verification of a Three-Dimensional Model of Delaware Bay, K. W. Kim, B. H. Johnson and J. Gebert, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p574-578.

Beach cusps

The Influence of Boundary Conditions on Beach Zonation, Ignacio Alonso and Federico Vilas, (*Coastal Dynamics '94*, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p417-431.

Beach erosion

- Analysis of Selected Prototype Wave and Runup Data, Todd L. Walton, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p913-917.
- Analyzing Wave and Storm Surge Impacts from Hurricane Andrew on the Dade County Beach Erosion Control and Hurricane Protection Project, Kimberley A. Taplin and Jon M. Hubertz, (Hurricanes of 1992: Lessons Leamed and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p587-596.
- Coastal and Oceanographic Impact of Hurricane Andrew, Hsiang Wang and Lihwa Lin, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p791-798.
- Crest-Breaking Time-Lapse Approach for Measuring Breaker Angle, P. Chandramohan, B. U. Nayak and N. M. Anand, WW May/June 94, p318-324.
- An Experimental and Analytical Study of the Shoreline Response to Non-Parallel Breakwaters in Oblique Waves, Michael E. McCormick and Richard W. Gordon, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p251-263.
- Include Recreational Benefits in Beach Protection, CE July 94, p6.

Modelling Large-Scale Coast Evolution, Zbigniew Pruszak and Ryszard B. Zeidler, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p446-461.

Port Authority's Role in Inlet Management and Beneficial Use of Dredged Material, Malcolm E. McLouth, Joseph Lapolla and Kevin Bodge, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p971-980.

Beach nourishment

Application of a Parametric Long Term Model Concept to the Delray Beach Nourishment Program, Michele Capo-bianco, Huib J. De Vriend, Robert J. Nicholls and Marcel J. F. Stive, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p391-401.

Beach Nourishment in Presence of Seawall, Robert G. Dean and Chul-Hee Yoo, WW May/June 94, p302-316. Beneficial Uses of Dredged Material on the Upper Great

Lakes, Douglas J. Zande and M. Pamela Horner, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p654-663.

The Continental Shelf: A Source for Naturally-Delivered Beach Sand, Robert H. Osborne, Kelly A. Ahlschwede, Deacn Sand, Robert H. Osborne, Kelly A. Ahlschwede, Sean D. Broadhead, Kyung Cho, Joshua R. Feffer, Arthur C. Lee, Jinyou Liu, Craig Magnusen, Janette M. Murrillo de Nava, Rory A. Robinson, Chia-Chen Yeh and Yi Lu, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p335-349.

Coordinating the Feasibility of a Dredged Material Separation System Using Hydrocyclones for the Maintenance Dredging Operation at Canaveral Harbor, Florida, Deborah R. Heibel, Mitch A. Granat and Mark Wolff, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p38-47.

Developments in Dredges during the last decade, Ruud Ouwerkerk and Hans Greve, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p690-700.

Environmental Restoration and Enhancement using Dredged Material in Chesapeake Bay, Maryland, S. D. Garbarino, R. N. Blama, M. C. Landin, S. R. Maynord and T. R. Patin, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p384-393.

History of Entrance Channel Dredging and Disposal Operations: St. Marys, Georgia/Florida, Joan Pope, J. Bailey Smith and Laurel T. Gorman, (Dredging '94, E. Clark

McNair, Jr., ed., 1994), p906-917.

Interdependence of Beach Fill Volumes and Repetition Intervals, Hans-H. Dette, Alfred Fuehrboeter and Arved J.

Raudkivi, WW Nov./Dec. 94, p580-593.

The Nourtec Experiment of Terschelling: Process-Oriented Monitoring of a Shoreface Nourishment (1993-1996), P. Hoekstra, K. T. Houwman, A. Kroon, P. van Vessem and B. G. Ruessink, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p402-416.

Phased and Layered Sampling for Navy Dredging, Sherry L. Ashbaugh, (*Dredging '94*, E. Clark McNair, Jr., ed.,

1994), p1436-1440.

Port Authority's Role in Inlet Management and Beneficial Use of Dredged Material, Malcolm E. McLouth, Joseph Lapolla and Kevin Bodge, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p971-980.

Analysis of Bayed Beaches in Static Equilibrium, Soon-Keat Tan and Yee-Meng Chiew, WW Mar./Apr. 94, p145-153.

Analysis of Sand Movement on Noto Coast by Geochemical Method, Kazumasa Mizumura, Toshiharu Nishimoto and Takahiko Yamamoto, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p923-927.

Beach Nourishment in Presence of Seawall, Robert G. Dean and Chul-Hee Yoo, WW May/June 94, p302-316.

Calibration and Validation of a Cross-Shore Transport Model, J. Nicholson and B. A. O'Connor, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p586-598.

Coastal Groins and Nearshore Breakwaters, U.S. Army Corps of Engineers, 1994, 0-87262-998-8, 90pp.

Combined Oscillatory and Steady Flow Over Ripples, K. I. Mahesha Ranasoma and John F. A. Sleath, WW July/ Aug. 94, p331-346.

Comparison of Wave Reflection Equations with Wave-Tank Data, Dennis C. Cotter and Subrata K. Chakrabarti,

Tank Data, Dennis C. Cotter and Subrata R. Chakrabarn, WW Mar./Apr. 94, p226-232.

The Daytona Beach "Large Wave" Event of 3 July 1992, Robert J. Thieke, Robert G. Dean and Andrew W. Garcia, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p45-

The Delta Flume'93 Experiment, A. S.-Arcilla, J. A. Roelvink, B. A. O'Connor, A. Reniers and J. A. Jiménez, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p488-

Equilibrium Beach Profiles on the Catalan Coast, J. P. Sierannoun beach Promes on the Catanan Coast, J. F. Ster-ra, A. Lo Presti and A. Sánchez-Arcilla, *Coastal Dy-namics '94*, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p432-445.

Evaluation of Depth-Limited Wave Breaking Criteria, George M. Kaminsky and Nicholas C. Kraus, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p180-193.

Evolution of Breaking Directional Spectral Waves in the Nearshore Zone, H. Tuba Özkan and James T. Kirby, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p849-863

Hurricane Iniki Effects on Coral Sand and Beach Processes on Kauai, Hans-Jürgen Krock and Doug Neill, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed.,

1994), p782-790.

Magnetic Tracing of Beach Sand: Preliminary Results, Kuno D. van der Post, Frank Oldfield and George Voulgaris, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p323-

Nearshore Breaking Waves: A Numerical Model, Scott L. Douglass and Juan C. Ortiz, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p864-879.

Numerical Model of the Longshore Current on a Barred Beach, Jane McKee Smith, Magnus Larson and Nicholas C. Kraus, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994). p798-812.

Nutrient Retention Time in High-Permeability, Oil-Fouled Beach, William R. Wise, Oktay Güven, Fred J. Molz and Steve C. McCutcheon, EE Nov./Dec. 94, p1361-1379.

Performance Evaluation of Offshore Breakwaters a Field and Computational Study, Andrew J. Chadwick, Christoper Fleming, Jonathan Simm and Geoffrey N. Bullock, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p950-

Physical Modelling of the Response of Shingle Beaches in the Presence of Control Structures, Tom T. Coates, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p924-

937

Sediment Transport Under Wave-Current Interaction on Macro-Tidal Beaches, Franck Levoy, Olivier Monfort and Hélène Rousset, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p727-741.

Shoreline Solution for Tapered Beach Fill, Todd L. Walton, Jr., WW Nov./Dec. 94, p651-655.

Surf-Similarity Parameter for Breaking Solitary-Wave Runup, Nobuhisa Kobayashi and Entin A. Karjadi, WW Nov./Dec. 94, p645-650.

The TMA Wave-Energy Constraint and Cohesive Shore-Profile Shapes, Charles N. Johnson, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p236-250.

Velocity Moments on a Macro-Tidal Intermediate Beach, Yolanda L. M. Foote and David A. Huntley, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p794-808.

Wave Run-Up and Reflection on a Permeable Sea Wall, Mitsuo Takezawa, Susumu Kubota and Shintaro Hotta, (Ocean Wave Measurement and Analysis, Orville T Magoon, ed. and J. Michael Hemsley, ed., 1994), p680-694

Wave Setup Near a Seawall: Experiments and a Numerical Model, K. A. Rakha and J. W. Kamphuis, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p835-848.

Advanced Nonlinear Formulation for Reinforced Concrete Beam-Columns, B. A. Izzuddin, C. G. Karayannis and

A. S. Elnashai, ST Oct. 94, p2913-2934. Analysis of Unstiffened and Stiffened Tubular Members Under External Pressure and Structural Loads, Spyros A. Karamanos and John L. Tassoulas, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1520-1525

Application of Adaptive Analysis to Reinforced Concrete Frames, C. G. Karayannis, B. A. Izzuddin and A. S. El-

nashai, ST Oct. 94, p2935-2957

ATLSS Connectors in Semi-Rigid Composite Connections, Alan M. Rosa, Le-Wu Lu and B. Vincent Viscomi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1149-1154. Column and Beam-Column Design - A World View, N. E.

Shanmugam and W. F. Chen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1581-1586.

PIST-1360.

Cyclic Testing of Pultruded Fiber-Reinforced Plastic Beam-Column Rigid Connection, Michel Bruneau and David Walker, ST Sept. 94, 2p637-2652.

Guidelines for Design of Joints between Steel Beams and

Reinforced Concrete Columns, ASCE Task Committee on Design Criteria for Composite Structures in Steel and Concrete, ST Aug. 94, p2330-2357. High-Strength Concrete Columns: State of the Knowledge,

A. Azizinamini, P. Paultre and M. Saatcioglu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p444-449.

Inelastic and Stability Anlysis of Flexibly Connected Steel Frames by Springs-in-Series Model, C. Y. Yau and S. L. Chan, ST Oct. 94, p2803-2819.

Chair, S1 Oct. 94, p.2603-2505 Lateral Postbuckling Analysis of Beam-Columns, A. N. Kounadis and G. I. Ioannidis, EM Apr. 94, p695-706. Moment-Curvature Relationships for Dented Tubular Sec-tions. L. Duan, J. T. Loh and W. F. Chen, ST Mar. 93,

Nonlinear Analysis of Two-Layered Wood Members with Interlayer Slip, Dan L. Wheat and Jose M. Calixto, ST June 94, p1909-1929.

Nonlinear Inelastic Analysis of Steel Beam-Columns I: Theory, Yong Lin Pi and N. S. Trahair, ST July 94, p2041-2061.

Nonlinear Inelastic Analysis of Steel Beam-Columns II: Applications, Yong Lin Pi and N. S. Trahair, ST July 94, p2062-2085.

Novel Design Algorithms for K Factor Calculation and Beam-Column Selection, N. Agbayani, P. Jayachandran and D. Sriram, ST Dec. 93, p3630-3648

Parameters Affecting Distortional Buckling of Tapered Steel Members, Hamid Reza Ronagh and Mark Andrew Bradford, ST Nov. 94, p3137-3155.

Steel Compression Member Design in the 1994 Canadian Standard, D. J. Laurie Kennedy, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p221-226.

Variation of Ductility Capacity of Steel Beam-Columns, Masayoshi Nakashima, ST July 94, p1941-1960.

Amplified Microbending in Coated Optical Fibres, John

Roorda, EM Apr. 94, p917-921.

Application of Concrete-Filled Steel Tubular Columns in Tall Buildings in Earthquake Area, Chahg-Ji Gong, Xi Lin and Shao-Huai Cai, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p146-151.

An Assessment of the Joint Factor as Used in the Modified MEXE Method, N. G. Gong and B. S. Choo, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p704-711.

ATLSS Connections with Moment Capacity, Richard B. Garlock, Le-Wu Lu and B. Vincent Viscomi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p743-748.

Behavior of Deeply Corrugated Steel Plate in Culvert, Alan F. Rauch, Shad M. Sargand and Glenn A. Hazen,

ST May 94, p1651-1655.

Behavior of RC Beams under Sustained Load, Nie Jianguo and Shen Jumin, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p239-244.

Bulb-T and Glulam-FRP Beams for Timber Bridges, J. F. Davalos, H. V. S. GangaRao, S. S. Sonti, R. C. Moody and R. Hernandez, (Structures Congress XII, N. C Baker, ed. and Barry J. Loodno, ed., 1994), p1316-1321.

Comment on Global/Local Method for Low-Velocity Impact Problems, Minggang Zhou and William P. Schon-berg, EM May 94, p1042-1056.

Comparison of Simple and Chebychev Polynomials in Rayleigh-Ritz Analysis, Sarvesh Singhvi and Rakesh K. Kapania, EM Oct. 94, p2126-2135.

Comprehensive Reliability Analysis of Prestressed Concrete Beams, A. S. Al-Harthy and D. M. Frangopol, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p193-198.

Computer Analysis of Continuous P/C Highway Bridge Girders with Variable Depth, Hani Melhem and Weig Zhang, (Computing in Civil Engineering, Khalil

Zhang, (Computing Khozeimeh, ed., 1994), p696-703.
Continuum Model for Analysis of Multiply Connected Perforated Cores, Domenico Capuani, Marco Savoia and Ferdinando Laudiero, EM Aug. 94, p1641-1660.

Damage Prediction in Reinforced Concrete Structures under Cyclic Loading, B. Garstka, W. B. Krätzig and F. Stangenberg, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p280-289.

Development Length and Ultimate Strength of Fiberglass Pretensioned Beams, Mohsen A. Issa and Ahmed Amer, (Infrastructure: New Materials and Methods of Repair,

Kim D. Basham, ed., 1994), p408-416.

A Dome For the 21st Century, John Zils, Mark Sarkisian and Ahmad Abdelrazaq, CE Feb. 94, p36-39.

Dynamic Analysis of a High Speed Transport Model by Using a Piecewise Continuous Timoshenko Beam Model, Ji Yao Shen and William M. McGinley, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994),

Dynamic Response of Steel Fiber Reinforced Concrete, David H. Sanders and Qiudong Wu, (Structures Con-gress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p833-838.

Equations for Tapered Thin-Walled Beams of Generic Open Section, Sundaramoorthy Rajasekaran, EM Aug. 94, p1607-1629.

Experimental Verification of Beam Models for RC, Toshi-katsu Ichinose and Katsuki Takiguchi, ST Aug. 94, p2261-2280.

Flexural Analysis of Reinforced Concrete Beams Contain ing Steel Fibers, Byung Hwan Oh, ST Oct. 92, p2821-

Fracture Mechanics and Size Effect of Concrete in Tension, Tianxi Tang, Surendra P. Shah and Chengsheng Ouyang, ST Nov. 92, p3169-3185.

Galerkin Sampling Method for Stochastic Mechanics Prob-lems, P. D. Spanos and B. A. Zeldin, EM May 94, p1091-1106.

Glulam Gets New Layers, New Strength and New Uses, ET

Aug./Sept. 94, p8-9. Improved Wide-Column-Frame Analogy for Shear/Core Wall Analysis, A. K. H. Kwan, ST Feb. 93, p420-437.

Innovative Design of Steel Gable Frames, Thomas Sputo, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p337-342.

Instability of Tapered Thin-Walled Beams of Generic Section, Sundaramoorthy Rajasekaran, EM Aug. 94, p1630-1640.

Large Deflection of Beams under Moment Gradient, S. Chucheepsakul, S. Buncharoen and C. M. Wang, EM Sept. 94, p1848-1860.

Load-Deflection Behavior of Space-Based Inflatable Fabric Beams, J. A. Main, S. W. Peterson and A. M. Strauss, AS

Apr. 94, p225-238

Local Buckling of Pultruded FRP Beams: Theory and Experiment, L. C. Bank, M. Nadipelli, T. R. Gentry and J. S. Yin, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p417-422

Long-Term Deflection of RC Beams, W. A. M. Alwis, A. Olorunniwo and K. K. Ang, ST July 94, p2220-2226.

Marta North Line Midtown Station, Jerzy T. Jacak and Cheryl L. McAfee, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p176-181. Material Nonlinear Analysis of Thin-Walled Beams, A.

Prokić, ST Oct. 94, p2840-2852.

Microcomputer-Aided Analysis and Design of Spandrel Concrete Beams Subjected to Combined Bending and Torsional Loads, Nadar Ghafoori and Jeffrey Bucholc, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1711-1718.

Model for Optimal Design of Reinforced Concrete Beam, B. K. Chakrabarty, ST Nov. 92, p3238-3242.

Moment-Rotation Behavior of Pultruded Beam-to-Column Connections, J. T. Mottram and A. J. Bass, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p423-428.

Natural Decay Resistance of Glued-Laminated Beams Stephen L. Quarles, Kevin A. Flynn, William A. Dost and Mark G. Dietz, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p707-712.

Nonlinear Finite Element Analysis of Concrete Deep Beams, A. Fafitis and Y. H. Won, ST Apr. 94, p1202-

Object-Oriented Structural Analysis with Substructures, Richard Sause and Jun Song, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p153-160.

Recent Advances in 3D Non-Linear FE-Analysis of R/C and P/C Beam Structures, Franz-Josef Ulm, Jean-Luc Clément and Johann Guggenberger, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1427-1432.

Reliability Assessment of Prestressed Concrete Beams, Ali S. Al-Harthy and Dan M. Frangopol, ST Jan. 94, p180-

Reliability-Based Design of Prestressed Concrete Beams, Ali S. Al-Harthy and Dan M. Frangopol, ST Nov. 94, p3156-3177.

Shear Design Guidelines for Polyester Concrete Using Recycled Plastic, K. S. Rebeiz, S. P. Serhal and D. W. Fowler, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p821-826.

Shear Effects on the Static Behaviour of Stiffened Pierced Walls, B. S. Choo and G. Q. Li, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1719-1726.

Shear Failure of Concrete Beams Reinforced with Plates, M. Arduini, A. D'Ambrisi and A. Di Tommaso, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p123-130.

Shear-Stress Distribution in Symmetrically Tapered Cantilever Beam, Edwin P. Russo and Gregory Garic, ST Nov. 92, p3243-3249.

Simplified Strength Prediction for Cold-Formed C- and Z-Shapes, R. A. LaBoube, ST June 93, p1733-1739.

Static Behavior of Pultruded GFRP Sections, Hota V. S. GangaRao and V. Nagaraj, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p844-848

Static Response of Fiberglass Pretensioned Beams, Raja Sen, Mohsen Issa, Zeying Sun and Mohsen Shahawy, ST

Jan. 94, p252-268

Tests of Full-Size Pretensioned AASHTO Beams with Debonded Strands, O. Abdalla, J. A. Ramirez and R. H. Lee, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1409-1414.

Tests on Deep I-Shape Pultruded Beams, A. Zureick and L. F. Kahn, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1572-1577.

Time-Dependent Behavior of RC Members Strengthened

With FRP Laminates, Nikolaos Plevris and Thanasis C. Triantafillou, ST Mar. 94, p1016-1042.

Beams, cantilever

Crack Detection in Beams - Sensitivity Studies, Lidvin Kjerengtroen and Christopher Jenkins, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p483-490.

Beams, structural

Active Control of Axial Forces in Beam String Space Frames, Shiro Kato, Shoji Nakazawa, Yasuo Matsue and Tatsuo Yamashita, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p664-673.
A Distributed Parameter Model for the Dynamic Analysis

of Beam-like Structures with Varied Sectional Properties, Ji Yao Shen, Elias G. Abu-Saba, William M. des, J. Tao Shen, Enas G. Abd-Saoa, William St. McGinley, Lonnie Sharpe, Jr. and Lawrence W. Taylor, Jr., (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p110-123.

Evaluation of Software for Analysis and Design of Reinforced Concrete Structures, Andrew D. Betaque and Kamal B. Rojiani, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p466-473.

Morphology of Reciprocal Frame Three-Dimensional Gril-lage Structures, John C. Chilton, Ban Seng Choo and Jia Yu, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1065-1074.

Study on Mechanical Characteristics of Light-weight Complex Structure Composed of a Membrane and a Beam String Structure, Masao Saitoh, Akira Okada, Katsuo Maejima and Tetsuo Gohda, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p632-641.

Study on Structural Characteristics of Air-Inflated Beam Structures, Masaya Kawabata and Kazuo Ishii, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994),

p742-751.

Timber Structures, Daniel F. Tully, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p97-102.

Beams, supports

Analysis of Glulam-FRP Beams by a Layer-Wise Formulation, Julio F. Davalos, Youngchan Kim and Somnath S. Sonti, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p67-75.

Creep and Shrinkage Deflections of RC Beams with Steel Fibers, Kiang-Hwee Tan, P. Paramasivam and Kah-Chai

Tan, MT Nov. 94, p474-494.

Research of Strength and Deformations with Long-time Loading and the Use of Glassfiber Reinforced Concrete in Shells, G. K. Khaidukov and M. M. Lachinov, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p340-349.

Bearing capacity

Axisymmetric Plastic Plates with Ring Supports at Optimum Locations, C. M. Wang, S. K. Ting and W. A. M. Alwis, EM Feb. 94, p400-407

Bearing Capacity of Rectangular Footings on Geogrid-Reinforced Sand, Temel Yetimoglu, Jonathan T. H. Wu and Ahmet Saglamer, GT Dec. 94, p2083-2099.

Bearing Capacity of Shallow Foundations on Noncohesive Soils, Bohdan Zadroga, GT Nov. 94, p1991-2008

Bearing Capacity of Soils, U.S. Army Corps of Engineers, Department of the Army, 1993, 0-87262-997-X, 145pp. Computer-Assisted Design of Hollow Concrete Masonry Bearing Walls, Kathleen M. Bradley and Terence A.

Weigel, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1703-1710.

Concrete Beams with Externally Bonded Crabon Fiber Reinforced Plastic (CFRP) Strips, R. L. Sierakowski, C. A. Ross, J. W. Tedesco and M. L. Hughes, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p139-146.

Condition Assessment of Highway Bridges, Taner Aksel, Kuo-Liang Lee and Emin A. Aktan, (Structures Con-gress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1124-1130.

- Cyclic Axial Loading of Drilled Shafts in Cohesive Soil, Kevin J. McManus and Fred H. Kulhawy, GT Sept. 94, p1481-1497.
- Design of Low Rise Dome for the University of Hawaii at Manoa, Alfonso Lopez and Gerald, Orrison, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p393-400.
- Effect of Material Properties on Compactability and Bearing Capacity, Chris J. Semmelink and Alex T. Visser, TE July/Aug. 94, p570-589.
- Effects of SPT Equipment and Procedures on the Design of Shallow Foundations on Sand, William D. Kovacs, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p121-131.
- Evaluation of Laboratory Limerock Bearing Ratio Test on Pavement Soils in Florida, W. Virgil Ping and Zhiliang Yu, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p223-230.
- Footing Modulus Near Slopes, Mark C. Gemperline, (Vertical and Horizontal Deformations of Foundations and Embanness, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1058-1070.
- Influence of Flexible Mat on Settlements of Marine Clay, A. M. Deshmukh and V. T. Ganpule, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p887-896.
- Large-Scale Loading Tests of Shallow Footings in Pneumatic Caisson, Osamu Kusakabe, Yoshito Maeda and Masatoshi Ohuchi, GT Nov. 92, p1681-1695.
- Load Carrying Capacity of SPC Composite Column, Toshiyuki Tanaka, Kazuo Inoue and Cheol-hwan Kim, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p827-832.
- Load Settlement curve Method for Spread Footings of Sand, Jean-Louis Briaud and Philippe Jeanjean, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1774-1804.
- Load-Settlement Characteristics of Spread Footings, V. A. Diyaljee, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p249-252.
- Load-Settlement Prediction of Footings on Steep Slopes, Pedro Arduino, Emir J. Macari and Mark Gemperline, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1385-1399.
- Masonry Carries the Load, Daniel P. Abrams, CE Feb. 93, p66-67.
- Mechanical Behavior of Dowels Embedded in Concrete, Luigi Biolzi and Natalino Gattesco, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p630-635.
- A Nonlinear-Analysis-Based Procedure for Evaluating Load-Carrying Capacity of In-Plane Steel Frames, Fumio Nishino, Buntara S. Gan and Eiki Yamaguchi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), pl 179-1184.
- Note on Bearing Capacity of Soft Clays under Embankments, H. S. Yu and S. W. Sloan, GT Jan. 94, p246-255.
- Penetration Fracture of Ice Plate: 2D Analysis and Size Effect, Yuan-Neng Li and Zdeněk P. Bažant, EM July 94, p1481-1498.
- Reduction of Settlements Using Soil Reinforcement, M. Sherif Abdel-Baki and G. P. Raymond, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p525-537.
- Regularized Method in Limit Analysis, Gong-Liang Jiang, EM June 94, p1179-1197.
- Research and Application of Various Joints of Space Grid Structures in China, Xi-Liang Liu, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p221-228.

- Research of Strength and Deformations with Long-time Loading and the Use of Glassfiber Reinforced Concrete in Shells, G. K. Khaidukov and M. M. Lachinov, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p340-349.
- Seismic Bearing Capacity and Settlements of Foundations, R. Richards, Jr., D. G. Elms and M. Budhu, GT Apr. 93, p662-674.
- Seismic Settlement of Shallow Footings on Sands, Awad Al-Karni and Muniram Budhu, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p748-759.
- Settlement of Structures Supported on Marginal or Inadequate Soils Stiffened With Short Aggregate Piers, Ever-C. Lawton and Nathaniel S. Fox, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p962-974.
- Settlement of Test Footings: Predictions from the University of New Mexico, Koon Meng Chua, Ling Xu, Eric Pease and Sameer Tamare, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p240-244
- Static Pile Load-Movement From Dynamic Measurements, Frank Rausche, Mohamad Hussein, Garland Likins and Gabriel Thendean, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994, p.291–301.
- Strip Foundation on Geogrid-Reinforced Clay, E. C. Shin, B. M. Das, V. K. Puri and S. C. Yen, (Vernical and Horzcontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p538-547.
- Structural Capacity of Precast Piles with Grouted Base, Osamu Kusakabe, Masaaki Kakurai, Katsutoshi Ueno and Yoshinao Kurachi, GT Aug. 94, p1289-1306.
- Study on Structural Characteristics of Air-Inflated Beam Structures, Masaya Kawabata and Kazuo Ishii, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p742-751.
- The Tip Displacement of Drilled Shafts in Sands, V. N. Ghionna, M. Jamiolkowski, S. Pedroni and R. Salgado, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1039-1057.
- Ultimate Load Test of Slab-on-Girder Bridge, Baidar Bakht and Leslie G. Jaeger, ST June 92, p1608-1624.
- Ultimate Loading Capacity of Braced Domes, X. Chen, N. Wang and S. Z. Shen, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p539-546.
- Ultimate Strength of R/C Cooling Tower Shell, Takashi Hara, Shiro Kato and Hiroshi Nakamura, (Spatial, Latice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p877-
- 600. Vertical Displacement Induced in Soil by Conical Shell Foundations, Mohamed Abdel-Rahman and Adel Hanna, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p937-948.
- Vertical Uplift Capacity of Horizontal Anchors, Kanakapura S. Subba Rao and Jyant Kumar, GT July 94, p1134-1147.
- WAK and Full-Scale Load Tests on Granular Fill, Kevin G. Sutterer, Karl W. Myers and Glenn J. Rix, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p153-163.

Bearings

Seismic Isolation Retrofit of Existing Bridges, Ronald L. Mayes, Deepak Choudhury, Robert S. Crooks, David M. Jones and Richard P. Knight, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1179-1186.

Bed load

Bed-Load Sampling in Sand-Bed Rivers, Moustafa T. K. Gaweesh and Leo C. van Rijn, HY Dec. 94, p1364-

Carpet Flow Analysis, Yonas Kinfu and Michael C. Quick, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1161-1165.

Diaphragm Height of Ejector of Uniform Sediment, Nandana Vittal and G. A. Shivcharan Rao, HY Mar. 94,

Effect of Orientation and Size of Helley-Smith Sampler on Its Efficiency, Jocelyn M. Gaudet, André G. Roy and James L. Best, HY June 94, p758-766.

Estimating Local Bed Shear Stress in Large Gravel-Bed Rivers, Peter R. Wilcock, Alan F. Barta and Conor C. C. Shea, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p834-838.

Hydrodynamics of Mining Pits in Erodible Bed under Steady Flow, Mohammad Akram Gill, HY Nov. 94, p1337-1348.

Investigation of Saltating Particle Motions, Hong-Yuan Lee and In-Song Hsu, HY July 94, p831-845.

Motion of Contact-Load Particles at High Shear Stress, Fidelia N. Nnadi and Kenneth C. Wilson, HY Dec. 92, p1670-1684.

Prediction of Gravel Bedload with SAM, David R. Dawdy and Wen C. Wang, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p420-424.

Sediment Feed and Recirculating Flumes: Fundamental Difference, Gary Parker and Peter R. Wilcock, HY Nov.

93, p1192-1204.

Sediment Transport in Sewers and Design Implications, Chandramouli Nalluri and Aminuddin Ab Ghani, (Hy-draulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p933-938.

Using the SedBed Monitor to Measure Bed Load, Roger A. Kuhnle and Robert W. Derrow, II, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p129-138.

Bed load movement

An Approach to the Calculation Method of Mean Sediment Size, Yingyan Chen and Huilin Zhao, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p805-809.

Bed Load Prediction in Steep Mountain Rivers, Tamotsu Takahashi and Toyoaki Sawada, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p810-814.

Bed Load Roughness in Supercritical Flow, Scott E. ed Load Rouginiess in Supercritical Flow, Scott E. Stonestreet, Ronald R. Copeland and Darla C. McVan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p747-751.

Dredged Material Accumulation at a Dispersive Disposal Site, Mary Baker Wiley, Drew Carey, Thomas J. Fredette and W. F. Bohlen, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1172-1181.

Effects of Particle Shape on Bedload Transport, M. Moore and P. Diplas, (Hydraulic Engineering '94, George V. and P. Diplas, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p800-804.

Energy Losses in Steep Tributary Streams at Flows Near The Threshold of Bedload Entrainment, Matthew D. O'Connor, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p778-

Fluvial Hydraulics of Streams and Mountain Rivers with Mobile Bed, Wojciech Bartnik and Alicja Michalik, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p767-771.

Monitoring Gravel Movement Using Radio Transmitters, Edward F. Chacho, Jr., William W. Emmett and Robert L. Burrows, (Hydraudic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p785-

On Measurements of Particle Spinning Motion, Hong-Yuan Lee and In-Song Hsu, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p149-158.

Particle Dynamics and Bed Level Adjustments in a Mountain Stream, Paul A. Carling, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p839-843.

Prediction of Gravel Bedload with SAM, David R. Dawdy and Wen C. Wang, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry

N. Tuvel, ed., 1994), p420-424.

Procedures for Evaluating the Effects of Sedimentation on Flood Hazards in Urbanized Areas in the Southwestern U.S. R. A. Mussetter, P. F. Lagasse, M. D. Harvey and C. A. Anderson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p425-428. Relation of Unit Gravel Discharge to Mean Velocity, Lilian

Posada-G and Carl F. Nordin, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1050-1054.

Size Characteristics of Debris Flow Deposition, Huilin Zhao and Yingyan Chen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p777.

Thresholds for Gravel and Cobble Motion, Katherine J. Chase, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p790-

The Transport of Gravels in Boulder-Bed Streams, Alan F. Barta, Peter R. Wilcock and Conor C. C. Shea, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p780-784. Turbulent Structure of Water and Clay Suspensions with

Bed Load, Zhaoyin Wang and Peter Larsen, HY May 94,

p577-600.

Visual Investigation of Field Bed-Load Sampling, Moustafa T. K. Gaweesh, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation. Clifford A. Pugh, ed., 1994), p233-241.

Bed material

Bed Material and Numerical Modeling in a Gravel/Cobble Bed Stream, Robert T. Milhous, Russell A. Dodge and Perry L. Johnson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1055-1059.

Coarse Sediment Transport and the Maintenance of Fish Habitat in the Upper Colorado River, John Pitlick, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p855-859.

Critical and Supercritical Flows in two Unstable, Mountain Rivers, Toutle River System, Washington, Andrew Simon and J. H. Hardison, III, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p741-745.

Design Relationship for Filters in Bed Protection, K. J. Bakker, H. J. Verheij and M. B. de Groot, HY Sept. 94,

p1082-1088

Fluvial Hydraulics of Streams and Mountain Rivers with Mobile Bed, Wojciech Bartnik and Alicja Michalik, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p767-771.

Particle Dynamics and Bed Level Adjustments in a Mountain Stream, Paul A. Carling, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p839-843.

Sediment Transport Analysis Rio Grande Floodway at San Marcial Gauge, Mohammed A. Samad, (Hydraulic Engi-neering '94, George V. Cotroneo, ed. and Ralph R. Ru-mer, ed., 1994), p1115-1119.

Some Features of the Initial Stage of Sediment Motion in Water Flows, Svetlana G. Beloshapkova, Alexander V. Beloshapkov and Sergey M. Antsyferov, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p910-923.

Streamflow Related to Channel Geometry in Northern New England, Kevin J. Palaia and S. Lawrence Dingman, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p865-869.

Width Adjustment: Relative Dominance in Unstable Alluvial Streams, Andrew Simon, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p974-978.

Bed movements

Bed-Form Development, Stephen E. Coleman and Bruce W. Melville, HY May 94, p544-560.

Bed-Level Variation in Channel Expansions with Movable Beds, P. K. Mohapatra and S. Murty Bhallamudi, IR Nov./Dec. 94, p1114-1121.

Motion of Contact-Load Particles at High Shear Stress, Fidelia N. Nnadi and Kenneth C. Wilson, HY Dec. 92,

p1670-1684

A New LAX-WENDROFF Algorithm to Solve the Bed Continuity Equation With Slope Effect, Jean-Michel Tanguy, Bainian Zhang and Luc Hamm, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p134-148.

Vertical Sorting Within Dune Structure, Mohamed Abdel-Motaleb, (Fundamentals and Advancements in Hydrau-lic Measurements and Experimentation, Clifford A.

Pugh, ed., 1994), p139-148.

Bed ripples

Distribution of Suspended Sediment over Wave-Generated Ripples, Erik Asp Hansen, Jørgen Fredsøe and Rolf Deigaard, WW Jan./Feb. 94, p37-55.

Flow Resistance of High-Gradient Gravel Channels, R. G. Millar and M. C. Quick, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p717-721.

Flow Velocity Profiles in Gravel-Bed Rivers, Vito Ferro and Giorgio Baiamonte, HY Jan. 94, p60-80.

Inner Continental Shelf Transport Processes: The Middle Atlantic Bight, L. D. Wright, O. S. Madsen, T. A. Chised., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p867-878. holm and J. P. Xu, (Coastal Dynamics '94, A. S.-Arcilla,

Response of Velocity and Turbulence to Abrupt Changes from Smooth to Rough Beds in Open-channel Flows, Iehisa Nezu and Akihiro Tominaga, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p195-204.

Bed Load Roughness in Supercritical Flow, Scott E. Stonestreet, Ronald R. Copeland and Darla C. McVan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p747-751.

Bed-Form Development, Stephen E. Coleman and Bruce W. Melville, HY May 94, p544-560.

Floating Cover Influence on Sediment Transport in Dune-Bed Channels, Brennan T. Smith and Robert Ettema, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1156-1160.

Is Bedform Development Chaotic? César Mendoza Cabrales, (Hydraulic Engineering '94, George V Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p78-81.

Macro-Roughness Effects on Stream Reaeration, Douglas B. Moog and Gerhard H. Jirka, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p994-998.

Turbulence Measurements in Open-Channel Flows over Artificial Bed Forms, D. A. Lyn, HY Mar. 93, p306-326.

Bedrock

Palaeohydraulic reconstruction of floods in upland UK A. Carling, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p860-

Step Pool Geometry and Flow Characteristics in Low-Sediment-Storage Channel Beds, Tamir Grodek, Moshe Inbar and Asher P. Schick, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p819-823.

Combined Oscillatory and Steady Flow Over Ripples, K. I. Mahesha Ranasoma and John F. A. Sleath, WW July/ Aug. 94, p331-346.

Bein, Robert W.

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Belgium

Maintenance Dredging in the River Scheldt, an Environ-mental Approach, J. Smits, L. Meyvis and F. Wens, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p499-508.

Bench marks

Barriers to Constructability Implementation, James T. O'Connor and Steven J. Miller, CF May 94, p110-128. Constructability Programs: Method for Assessment and Benchmarking, James T. O'Connor and Steven J. Miller, CF Feb. 94, p46-64. Engineering R&D Strategy, Harvey M. Bernstein, CE Feb.

94, p44-46.

Roadmap to Current Benchmarking Literature, Andrew E. Jackson, Robert R. Safford and William W. Swart, ME Nov./Dec. 94, p60-67.

Bending

Amplified Microbending in Coated Optical Fibres, John Roorda, EM Apr. 94, p917-921. Analytical Solution for Bending of Coaxial Orthotropic

Cylinders, Claude Jolicoeur and Alain Cardou, EM Dec. 94, p2556-2574.

Bending of Cord Composite Plates, Carol Kittredge Shield and George A. Costello, EM Apr. 94, p876-892.

Dynamic Response of Fibre-Reinforced Composite Plates Under Distributed Impact Loads, R. K. Mittal and M. R. Khalili, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p94-109.

Effective Width of Locally Buckled Plates in Compression and Bending, Tsutomu Usami, ST May 93, p1358-1373. Elastic Constants for Z-Core Sandwich Panels, Tat-Ching Fung, Kang-Hai Tan and Tat-Seng Lok, ST Oct. 94, p3046-3055.

Flexural Member Bending Strength Limits in the New LRFD Bridge Code, Karl H. Frank, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p544-548.

High-Order Bending of Sandwich Beams with Transversely Flexible Core and Nonparallel Skins, D. Peled and Y.

Frostig, EM June 94, p1255-1269.

Inelastic Bending and Torsion of Steel I-Beams, Yong Lin Pi and N. S. Trahair, ST Dec. 94, p3397-3417.

Large Deformation Theory Using Truncated Rotations, Daniel A. Miller and Anthony N. Palazotto, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p137-146

Load-Deflection Behavior of Space-Based Inflatable Fabric Beams, J. A. Main, S. W. Peterson and A. M. Strauss, AS

Apr. 94, p225-238.

Modeling of Cyclic Moment-Rotation Response of Double-Angle Connections, Mario De Stefano, Antonello De Luca and Abolhassan Astaneh-Asl, ST Jan. 94, p212-229

Modelling of Extended Endplate Bolted Connections, Mohammed R. Bahaari and Archibald N. Sherbourne, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p731-736.

Real-Time Control for a Robotic Rebar Bender, Phillip S. Dunston and Leonhard E. Bernold, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul

R. Klarer, ed., 1994), p392-400.

Recent Advances in Biaxially Loaded Columns, ASCE-ACI Committee 441, Subcommittee on Biaxially Loaded Columns, (Hsu, C. T. T., chmn.), (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p450-454.

Rectangular Thick Plate with Free Edges on Pasternak Foundation, X. P. Shi, S. A. Tan and T. F. Fwa, EM May 94, p971-988.

Simple Semi-Loof Element for Analyzing Folded-Plate Structures, K. Y. Sze, EM Jan. 94, p120-134.

Spatial Structures Erected out of Thin Shell Elements Fabricated on Plane Followed by Bending, Vladimir V. Shugaev, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p867-876.

Stress and Displacement of Thick Doubly Curved Laminat-ed Shells, Chih-Ping Wu and Chi-Chuan Liu, EM July

94, p1403-1428.

Bending moments

Bridge Rail Impact Forcing Functions, Barry T. Rosson and Ronald K. Faller, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p91-96.

Combined Boundary Element / Finite Strip Analysis of Bridges, M. S. Cheung, Georges Akhras and W. Li, ST Mar. 94, p716-727.

Flat Plates with Regular and Irregular Column Layouts.l: Analysis, Kolbjorn Saether, ST May 94, p1563-1579. Flat Plates with Regular and Irregular Column Layouts.ll:

Flat Plates with Regular and Irregular Column Layouts.II: Numerical Evaluations, Kolbjorn Saether, ST May 94, p1580-1598.

Lateral Load Analysis of Groups of Piles and Drilled Shafts, Phillip S. K. Ooi and J. Michael Duncan, GT June 94, p1034-1050.

Load-Carrying Mechanism of Restrained Plates at Large Deflections, Zhiliang Fan, EM June 94, p1388-1391. Methods to Mitigate Thermally Induced Distortion, Fred

Methods to Mitigate Thermally Induced Distortion, Fred M. Cutting, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p514-523.

Lokaj, ed., 1994), p.11-323.

Proposed Test Method for Determining Bending Yield Moment of Nails, John H. Showalter, Jr. and David G. Poliock, Jr., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p.918-922.

and Barry J. Loodno, ed., 1994), py16-322. Thin-Walled Curved Beams. II: Analytical Solutions for Buckling of Arches, Young J. Kang and Chai H. Yoo, EM Oct. 94, p2102-2125.

Bends, hydraulic

Ice Accumulation Rate and the Geometry of Ice Jams in River Bends, Gilberto E. Urroz and Robert Ettema, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p386-390.

Benefit cost analysis

Comparative Analysis of Three Constructability Approaches, Jeffrey S. Russell, John G. Gugel and Michael W. Radtke, CO Mar. 94, p180-195.

Constructability Related to TQM, Value Engineering, and Cost/Benefits, Jeffrey S. Russell, Kevin E. Swiggum, Jeffrey M. Shapiro and Achmad F. Alaydrus, CF Feb. 94, p31-45.

Engineering R&D Strategy, Harvey M. Bernstein, CE Feb. 94, p44-46.

EPA's Regulatory Process: A New Way of Doing Business, Tudor T. Davies and Timothy J. Kasten, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p123-133.

Identifying Promising Pollution-Prevention Technologies, James D. Englehardt, EE May/June 94, p513-526.

Improvements to the Clean Water Act and Related Statutes, Howard Holme, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p233-257.

Liability Insurance for Design Professionals: Can't Live With It, Can't Live Without It? Robert A. Rubin, ME

Mar./Apr. 94, p18-23.

Market Models, Protest Bids, and Outliers in Contingent Valuation, Greg Lindsey, WR Jan./Feb. 94, p121-129.

Measuring the Benefits of Flood Risk Reduction, Leonard Shabman, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p122-135.

Optimization Analysis of Deficit Irrigation Systems, Francesco Mannocchi and Pompeo Mecarelli, IR May/June

94, p484-503.

Reliability-Based Assessment of Corps Structures, Mary Ann Leggett, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p73-81.

Risk Simulation Model for Rehabilitation Studies, Richard Males, David Moser, Michael Walsh, Walter Grayman and Craig Strus, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene I. Stakhiy. ed. 1994) n274-279.

d. and Eugene L. Stakhiv, ed., 1994), p.74-279.
Risk-Based Budgeting for Maintenance Dredging, Michael R. Walsh and David A. Moser, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p.734-242.

Uncertainty and Time Preference in Shore Protection, Kevin O'Grady and Leonard Shabman, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p136-154.

Benefits

ASCE Offers New Cancer Insurance Program, CE Jan. 94, p77.

A Comparative Study of U.S. and Russian High-Level Waste Repository Design Concepts, Z. T. Bieniawski and E. V. Kuzmin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p515-522.

Early-Completion Schedules: The Promise and Pitfalls, Roy Mendelsohn, ME Jan./Feb. 94, p28-30.

Firms Tackle Health-Care Costs, ME May/June 94, p3. Innovative Applications of Precast Concrete in Repair of Hydraulic Structures, James E. McDonald, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p963-970.

Lesson Learned form Implementing M&I Optimal Water Delivery, Otto J. Helweg and Lindell E. Ormsbee, (Water Policy and Management: Solving the Problems,

Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p730-733.

New and Innovative Repair Technologies (Soil Stabilization and Pot-Hole Repair/Prevention), William A. Mallow, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1097-1102.

Potential Economic Benefits of the Yucca Mountain Project, Richard A. Babcock, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p642-649.

Setting Competitive Water Reuse Rates, David D. Green and Stephen H. Riley, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p802-805.

Team-Building Process: Key to Better Project Results, Robert Albanese, ME Nov./Dec. 94, p36-44.

Water Resources Development in the 1990's: A New Process, Peter D. Binney, Lawrence H. Roth and Daniel D. Heagerty, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p822-825.

Bentonite

Benzene Transport Through Landfill Liners Containing Organophilic Bentonite, James A. Smith and Peter R. Jaffé, EE Nov./Dec. 94, p1559-1577.

Building A Barrier Wall Through Boulders, Donald R. McMahon, Michael J. Mann and Robert C. Tulett, CE

Oct. 94, p60-62.

Effect of Heat Treatment on Strength of Clays, R. C. Joshi, Gopal Achari, D. Horsfield and T. S. Nagaraj, GT June 94, p1080-1088.

Hydraulic Conductivity Assessment of Slurry Wall Using Piezocone Test, M. Manassero, GT Oct. 94, p1725-1746.

Washing of Bentonite in Laboratory Hydraulic-Conductivity Tests, Denis Marcotte, Jean Claude Marron and Marcel Fafard, EE May/June 94, p691-698.

Bering Se

Dredging in the Bering Sea St. George Island 1993-94 Harbor Dredging Project, William J. Gerken and Jeffrey F. Gilman, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1426-1435.

Berm

Analysis of Dredged Material Placed in Open Water, B. H. Johnson, N. W. Scheffner, A. M. Teeter, E. B. Hands and H. R. Moritz, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p18-27.

Constructing Beneficial Use Dredged Material Projects, Robert M. Parry, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p547-554.

Development of an Excavation Plan for Heavy Metal Contaminated Marsh Deposits, John J. Nocera and Thomas M. Simmons, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1220-1229.

Empirical Guidance for Siting Berms to Promote Stability or Nourishment Benefits, Edward B. Hands and Donald T. Resio, (Dredging '94, E. Clark McNair, Jr., ed.,

1994), p220-228.

Habitat Value of Offshore Dredged Material Berms for Fishery Resources, Douglas Clarke and Richard Kasul, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p938-945.

Influence of Wave Groups on Stability of Berm Breakwaters, Kevin R. Hall, WW Nov./Dec. 94, p630-636.

Performance of Nearshore Berm Disposal at Port Canaveral, Florida, Kevin R. Bodge, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1182-1191.

Technical Area 5 - Dredging Research Program, Thomas W. Richardson, (*Dredging '94*, E. Clark McNair, Jr., ed.,

1994), p1-10.

Wave Attenuation at the Mobile Stable Berm, Gregory L. Williams and Cheryl Burke Pollock, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and

J. Michael Hemsley, ed., 1994), p339-351.

Wave Measurement Near Reflective Structures, P. A. D. Bird, M. A. Davidson, G. N. Bullock and D. A. Huntley, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p701-711.

Wave Reflection: Field Measurements, Analysis and Theoretical Developments, Mark A. Davidson, Paul A. D. Bird, Geoff N. Bullock and David A. Huntley, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p642-655.

Wave-Induced Forces on Armor Unit on Berm Breakwaters, Alf Tørum, WW May/June 94, p251-268.

Biaxial bending

Design Aids for Reinforced Concrete Columns, Bao-Jun Sun and Zhi-Tao Lu, ST Nov. 92, p2986-2995.

Explicit Stresses under Rectangular Footings, R. Irles and F. Irles, GT Feb. 94, p444-450.

Nonlinear Inelastic Analysis of Steel Beam-Columns I: Theory, Yong Lin Pi and N. S. Trahair, ST July 94, p2041-2061.

Nonlinear Inelastic Analysis of Steel Beam-Columns II: Applications, Yong Lin Pi and N. S. Trahair, ST July 94, p2062-2085.

Biaxial loads

Recent Advances in Biaxially Loaded Columns, ASCE-ACI Committee 441, Subcommittee on Biaxially Loaded Columns, (Hsu, C. T. T., chmn.), (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p450-454.

Biaxial stress

Stress-Strain Curves for Brick Masonry in Biaxial Compression, Krishna Naraine and Sachchidanand Sinha, ST June 92, p1451-1461.

Biaxial tests

Biaxial Testing of Brittle Repair Material for Rigid Pavements, George Z. Voyiadjis and Taher M. Abu-Lebdeh, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p964-971.

Bibliographies

ASCE Annual Combined Index - 1993, ISSN: 0742-1753, American Society of Civil Engineers, Publications Division, 1994, 0-87262-851-5, 1055pp.

Transactions of the American Society of Civil Engineers -1993, American Society of Civil Engineers, (Publica-tions Division, chmn.), 1994, 0-87262-828-0, 760pp.

Characteristics of Trips by Foot and Bicycle Modes in Indian City, V. Thamizh Arasan, V. R. Rengaraju and K. V. Krishna Rao, TE Mar./Apr. 94, p283-294.

Redesigning Suburbia for Walking and Transit: Emerging Concepts, Farhad Atash, UP Mar. 94, p48-57.

Strategies for Increasing Bicycle and Pedestrian Safety and Use, Brian L. Bowman, Robert L. Vecellio and David W. Haynes, UP Sept. 94, p105-114.

Analogy-Based Solution to Markup Estimation Problem, Tarek Hegazy and Osama Moselhi, CP Jan. 94, p72-87.

Average-Bid Method—Competitive Bidding Strategy, Photios G. Joannou and Sou-Sen Leu, CO Mar. 93. p131-147.

Bidding Model for Refurbishment Work, Teo Ho Pin and W. F. Scott, CO June 94, p257-273.

Cities Beware: Bidders Must be Treated Equally, CE June 94, p30.

Computer Implementation of Fuzzy Reasoning in Tender-ing, C. M. Tam, K. C. Lam and Albert T. P. So, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1357-1364.

Courts Claim Surety is Sure Thing, CE Jan. 94, p27.

Creating and Abstracting Lessons-Learned from BCO Reviews, Michael C. Fu and E. William East, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1146-1155.

For Successful Design-Build, Onus is on the Owner (ltr), CE Aug. 94, p32-33.

Improving Contractors' Bids Using Preference Reversal Phenomenon, Richard de Neufville and Jayme Todd Smith, CO Dec. 94, p706-719.

Interpretive and Modelling Problems of Risk and Uncertainty in Bidding Techniques, David Eaton, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2038-2045

Is it Necessary to Compromise Engineering Ethics to Remain Competitive? Jim V. Anderson, El Oct. 94, p379-383

Preparation of Bid Documents for Dredging/Excavating Contaminated Sediments, Soils and Marsh Deposits at the Marathon Battery Superfund Site Cold Spring, NY, Thomas M. Simmons, Gregory P. Matthews and Nick Multari, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1201-1209.

Reforming Japan's Public Works, Derek Dylan Bell, WP Special issue 94, p6-9.

Unsuccessful Bidder Succeeds on Wage Issue, CE July 94, p24-25.

Bieniek, Maciej B.

Atlanta Ceremony Celebrates 13 New Honorary Members of ASCE, NE Dec. 94, p2-3.

Bieniek, Maciej P.

ASCE Elevates 13 of Its Own to Honorary Membership, NE May 94, p3.

Analysis of blocking phenomena in bifurcated channels found in mountainous rivers, Kazuyoshi Hasegawa and Toshinao Mizugaki, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p829-833.

Finite-Element Analysis of Elastoplastic Discontinuities, Paul Steinmann and Kaspar Willam, EM Nov. 94,

p2428-2442.

Lateral Postbuckling Analysis of Beam-Columns, A. N. Kounadis and G. I. Ioannidis, EM Apr. 94, p695-706.

Localization Analysis of Nonlocal Model Based on Crack Interactions, Milan Jirásek and Zdeněk P. Bažant, EM July 94, p1521-1542.

Nonlinear Finite Deformation Analysis of Beams and Col-umns, Ronald Y. S. Pak and Eric J. Stauffer, EM Oct. 94, p2136-2153.

Nonlinear Stability of Differential Surge Chambers, Xiao-Liang Yang and Chen-Shan Kung, HY Nov. 92, p1526-

Slender Rigid Block Motion, S. J. Hogan, EM Jan. 94, p11-24.

Binders, materials

Fundamental Properties of Asphalt Rubber Blends, William H. Daly, Louay N. Mohammad, Ioan Negulescu, Harold R. Paul and Jeffrey Youngblood, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p425-431.

A Look at the Superpave Level 1 Mix Design Process, R. Michael Anderson and Robert B. McGennis, (Infrastruc-ture: New Materials and Methods of Repair, Kim D.

Basham, ed., 1994), p880-887.

Modification of Asphalt Binders: A Critical Evaluation Using the New SHRP Methods, H. U. Bahia, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p859-879.

Production of Lunar Concrete Using Molten Sulfur, Husam A. Omar and Mohsen Issa, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p952-959.

Relationship of SHRP Binder Test, Frank Fee, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p114-122.

Rheological Evaluation of Engineered Asphalt Binders, H. U. Bahia and N. I. Kamel, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), n97-113.

The Use of Crumb Rubber Modifier in Hot-Mix Asphalt, Mark S. Buncher and E. R. Brown, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p53-63.

Use of Recycled Tire Rubbers in Concrete, Timothy D. Biel and Hosin Lee, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p351-358

Bioassay

A Framework for the Environmental Risk Assessment of Contaminated Sediments, Tom M. Dillon, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p141-149.

Preliminary Screening Studies for Dredge Disposal Options, Howard L. Cumberland, Barry J. Snyder and William C. Lester, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p342-348.

Quality Assurance and Quality Control in Laboratory Bioassays of Dredged Material, David W. Moore, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p728-736.

TBP Revisited: A Ten Year Perspective on a Screening Test for Dredged Sediment Bioaccumulation Potential, Victor A. McFarland and Paul W. Ferguson, (*Dredging* '94, E. Clark McNair, Jr., ed., 1994), p718-727.

Biochemical oxygen demand

Assessment of BNR Systems in Florida, Richard O. Mines, Jr. and C. William Woods, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p436-443.

Clarifier Enhancements Yield Excellent Performance, Cindy L. Wallis-Lage and David B. Hunt, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p194-201.

Computer Aided Design of Trickling Filters, Bruce E. Logan, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), 9678-685.

Nitrification in Single-Stage Trickling Filters, Rao Y. Surampalli, O. Karl Scheible and Shankha K. Banerji, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p694-701.

Biodegradation

Anaerobic Biodegradation of Chloroform under Methanogenic Conditions, Devesh, Munish Gupta, Makram T. Suidan and Gregory D. Sayles, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p609-616.

Biodegradation of 2,4-Dinitrotoluene in a Two Stage System, S. L. VanderLoop, M. T. Suidan, M. A. Moteleb and S. W. Maloney, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p710-717.

Biodegradation of Phenanthrene in Sand Columns in the Presence of Nonionic Surfactants, David Norris and Tariq Ahmed, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p360-367.

Biological Colonization of Granular Activated Carbon Filters in Drinking-Water Treatment, Pierre Servais, Gilles Billen and Pascale Bouillot, EE July/Aug. 94, p888-899. Biotransformation of Pesticides in Simulated Groundwater Columns, Gregory G. Wilber and Stuart R. Garrett, Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p368-375.

Bug-Based Process Ready to Take Toxics Out of Incinerator Ash and Soil, ET Aug/Sept. 94, p1,6.

The Evaluation of Empty Bed Contact Time on the Biodegradation of Pentachlorophenol using an Anaerobic GAC Fluidized Bed, Gregory J. Wilson, Julie A. Wagner, Amid P. Khodadoust, Makram T. Suidan and Richard C. Brenner, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p624-631.

In Situ Sediment Treatment of Dofasco Boatslip, Hamilton Harbour, Tom Murphy, Henry Brouwer and Jay Babin, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1071-1080.

Minimization of Multistage RBC Active Disc Area, Roland Leduc and Ian Buchanan, EE Mar./Apr. 93, p271-286.

Model for Treatment of Trichloroethylene by Methanotrophic Biofilms, James E. Anderson and Perry L. McCarty, EE Mar./Apr. 94, p379-400.

Modeling of Biofiltration of Natural Organic Matter in Drinking Water Treatment, Jack Z. Wang and R. Scott Summers, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p452-459.

Off-Gas Recycle for VOC Emission Control: Conceptual Model, Yerachmiel Argaman and Jack L. Musterman, EE May/June 94, p573-587.

Process Selection for Treatment of SOC Contaminated Waters, Bruce I. Dvorak, Desmond F. Lawler and Gerald E. Speitel, Jr., (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p601-608.

Treatment of Tetrachloroethylene with Anaerobic Attached Film Process, K. H. Chu and W. J. Jewell, EE Jan./Feb. 94, p58-71.

Biofilm

Analysis of Biomass Distribution and Chemical Interactions in Nitrifying Biofilms, Edna M. C. V. Flora, Joseph R. V. Flora, Makram T. Suidan and Byung J. Kim, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p305-312.

Biofilm Sorption of Natural Organic Material, Gary Carlson and JoAnn Silverstein, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare

Edwards, ed., 1994), p460-466.

Biotransformation of Pesticides in Simulated Groundwater Columns, Gregory G. Wilber and Stuart R. Garrett, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p368-375.

Effect of Roughness and Thickness of Biofilms on External Mass Transfer Resistance, Tian C. Zhang, Paul L. Bishop and James T. Gibbs, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p593-600.

Model for Treatment of Trichloroethylene by Methanotrophic Biofilms, James E. Anderson and Perry L. McCarty, EE Mar./Apr. 94, p379-400.

Oxygen Utilization of Trickling Filter Biofilms, Steven W. Hinton and H. David Stensel, EE Sept./Oct. 94, p1284-1297.

Biological operations

Biosphere II - Its Effects on Space Colonization, Chris Cassidy, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p826-832.

Lunar Base Aspects for Biotechnology Industry, Judith Fielder and Nickolaus Leggett, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1230-1236.

Biological properties

Biological Fluidized Beds Containing Widely Different Bioparticles, Kyoung S. Ro and Johannes B. Neethling, EE Nov./Dec. 94, p1416-1426. The Performance and Behaviour of Biological Filter Walls as Affected by Cyclical Temperature Changes, George L. England, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p57-76.

Recent Assessment and Decontamination Studies of Contaminated Sediments in the New York/New Jersey Harbor, Eric Stern, Joseph Olha, Audrey A. Massa and Bryce Wisemiller, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p458-467.

Ed., 1994, 5435-407.

Tailwater Fishery Management Using a Fish Bioenergetics

Model, Ming Shiao, Gary Hauser, Gary Chapman, Bruce

Yeager, Tom McDonough and Jim Ruane, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p45-48.

TBP Revisited: A Ten Year Perspective on a Screening Test for Dredged Sediment Bioaccumulation Potential, Victor A. McFarland and Paul W. Ferguson, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p718-727.

Biological treatment

Assessment of BNR Systems in Florida, Richard O. Mines, Jr. and C. William Woods, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p436-443.
Biological Reduction of Chromium by E. COLI, Hai Shen

and Yi-Tin Wang, EE May/June 94, p560-572.
Biological Removal of Heavy Metals by Sulfate Reduction
Using a Submerged Packed Tower, George Neserke,
Linda Figueroa and Nevis Cook, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p257-264.

Comparison of Biological and Chemical/Physical Iron Removal, Charlotte D. Smith and James F. Smith, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p74-81.

Filtration and Backwashing Performance of Biologically Active Filters, A. Amirtharajah, Rasheed Ahmad, A. Al-Shawwa and P. M. Huck, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p178-185.

Mechanism of Biological Treatment in Plug-Flow or Batch Systems, Hasan Ali San, EE July/Aug. 92, p614-628. Minimization of Multistage RBC Active Disc Area, Roland Leduc and Ian Buchanan, EE Mar./Apr. 93, p271-286.

Model for Treatment of Trichloroethylene by Methano-trophic Biofilms, James E. Anderson and Perry L. McCarty, EE Mar./Apr. 94, p379-400.

Nutrient Retention Time in High-Permeability, Oil-Fouled Beach, William R. Wise, Oktay Güven, Fred J. Molz and Steve C. McCutcheon, EE Nov./Dec. 94, p1361-1379

Process Selection for Treatment of SOC Contaminated Wa ters, Bruce I. Dvorak, Desmond F. Lawler and Gerald E. Speitel, Jr., (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p601-608.

oil Washing and Biotreatment of Petroleum-Contaminated Soils, Alok Bhandari, Dennis C. Dove and John T. Novak, EE Sept./Oct. 94, p1151-1169

Three-Stream Bioprocess Fights Phosphorus in Wastewater Effluent, ET June/July 94, p8.

Water Polishing by Constructed Wetland Ecosystems, Danuta Leszczynska and Andrew A. Dzurik, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p710-713.

Analysis of Biomass Distribution and Chemical Interactions in Nitrifying Biofilms, Edna M. C. V. Flora, Joseph R. V. Flora, Makram T. Suidan and Byung J. Kim, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p305-312.

Biofilm Sorption of Natural Organic Material, Gary Carlson and JoAnn Silverstein, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p460-466.

Biological Colonization of Granular Activated Carbon Filters in Drinking-Water Treatment, Pierre Servais, Gilles

Billen and Pascale Bouillot, EE July/Aug. 94, p888-899. Kinetics of Toluene Degradation by Denitrifying Aquifer Microorganisms, Pedro J. J. Alvarez, Paul J. Anid and Timothy M. Vogel, EE Sept./Oct. 94, p1327-1336.

Modeling of Biofiltration of Natural Organic Matter in Drinking Water Treatment, Jack Z. Wang and R. Scott Summers, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p452-459.

Biomechanics

Extensions of Finite Element Dental Stress Analysis, Robert E. Efimba and E. M. Ahmed, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1928-1935.

Do We Need More Waterbird Nesting Islands in Galveston Bay, Texas? (and if so, how and where do we build them?), Phil Glass, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p796-809.

Dredged Material Disposal and Migratory Birds, Les E. Weigum, (*Dredging '94*, E. Clark McNair, Jr., ed.,

1994), p1380-1387.

Enhancing Habitat at an Onshore Dredge Disposal Site, Gary W. Oates, William J. Silva and Gregory P. Mailho, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1461-

Poplar Island Reclamation and Beneficial Uses of Dredged Material, Edward T. Fulford, (Dredging '94, E. Clark

McNair, Jr., ed., 1994), p1406-1415.

Site Selection for Beneficial Uses Of Dredged Material in Galveston Bay, Texas, USA, Russell Swafford and Eichard F. Gorini, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p399-409.

Case Study of Modified Bituminous Mixtures: Somerset, Kentucky, Amy L. Simpson and Kamyar C. Mahboub, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p88-96.

Statistical Quality Control and Assurance in Bituminous Materials, Y. J. Chou and W. V. Ping, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1051-1058.

Bituminous coatings

Determining Bituminous Pavement Shear Modulus, John E. Haddock and Thomas D. White, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p788-795.

Measured Downdrag on Seven Coated and Uncoated Piles in New Orleans, Randall K. Bush and Jean-Louis Briaud, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1011-1027.

Black Sea

Low-frequency Fluctuations of Suspended Sand and Wave Groups in the Surf Zone, R. D. Kos'yan, S. Yu. Kuzne-Oroups in the Sun Zolie, R. D. Kos yant, S. Tu. Kaziertsov and N. V. Pykhov, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p352-363.

Blast effects

Blast Demolition of Reinforced Concrete Industrial Chimneys, Friedhelm Stangenberg, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p290-299.

Ground Motions and Air-Blast Effects of Explosive Demolition of Structures, Charles H. Dowding, CO Dec. 94,

When is Finite Element Analysis Appropriate? Darrell D. Barker and James Weeks, CC Mar. 94, p1,12-15.

Simulation of Blast Pressure on Flexible Panels, Avinash Singhal, Debra Larson, Sanjay Govil and Vikram Karmakar, ST July 94, p2011-2020.

Blast Densification of a Thick, Loose Debris Flow at Mt. St. Helen's., Washington, Joseph E. Hachey, Robert L. Plum, R. John Byrne, Alan P. Kilian and David V. Jenkins, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p502-512.

Construction of a Cofferdam Pressure Relief System, J. Taylor, W. L. Galbraith, G. Richters, J. E. Baka and C. C. Chang, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p93-111.

Vibration Induced Settlement From Blast Densification and Pile Driving, Charles H. Dowding, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1672-1688.

California Blimp Hangars, Framed in Wood, Are Land-marks, CE Oct. 94, p70.

Analysis of blocking phenomena in bifurcated channels found in mountainous rivers, Kazuyoshi Hasegawa and Toshinao Mizugaki, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p829-833.

Approximating the Imbibition and Absorption Behavior of a Distribution of Matrix Blocks by an Equivalent Spherical Block, Robert W. Zimmerman and Gudmundur S. Bodvarsson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2030-2037.

Slender Rigid Block Motion, S. J. Hogan, EM Jan. 94,

p11-24.

Thermal Conductivity of Earth Blocks, Joe O. Akin-musuru, MT Aug. 94, p341-351.

Balancing Recreational, Economic Development and Environmental Protection Goals for New Recreational Boating Facilities in the State of Wisconsin, U.S.A. Fred Klancnik, James Rooney and Larry Freidig, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p7-19.

Boating Needs Assessments (BNA) for Evaluating Boat Ramp and Facilities Needs, Jon Guerry Taylor and James Paul Posda, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik,

ed., 1994), p20-28.

Chicago River Navigation Study, Michael A. Kraman, Nicholas Pansic and Vedat Demirel, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p321-332.

Conceptualization of Boat Access Development Zones, David G. White, (Marinas, Parks and Recreation Develoments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p605-614.

Differentiating the Experience of Boater "Publics", Ellen B. Drogin, Andrew Holdnak, Alan R. Graefe and James M. Falk, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994),

p132-139.

A Predictive Model of Sewage Pumpout Station Use Among Chesapeake Bay Boaters, Stuart Cottrell and Alan Graefe, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p59-68.

Retrofit Racks for Revenues, Patrick Farrell, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p499-505.

Simulation Modeling Drystack Marina Facilities, Jeffrey G. Shelden and Kerry Simpson, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p587-596.

Steep Constructed Stream Channels and Chutes, Kenneth R. Wright, F. Robert McGregor and Gary Lacy, (Hy-

R. Wright, F. Kobert McCaregor and Cary Lacy, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p657-661.
Waterfronts: GATEWAY to Your Community, Allyson Forsythe-Fiene, Robert D. Espeseth and Joseph T. O'Leary, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p449-459.

"A Comparison of Characteristics and Economic Expenditures of Boat Show Patrons At Two Types of Boat Shows", Mary H. Bielen, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p248-256.

Bolts

3D Simulation of End-Plate Bolted Connections, Archibald N. Sherbourne and Mohammed R. Bahaari, ST Nov. 94,

The Development, Installation, and Monitoring of Smart Bolts for Bridges, I. Wayne Wallace, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham,

new Multerius una memora of repuir, nin B. Jassian, ed., 1994), p1171-1178.

Effect of Bolt Slippage on Ultimate Behavior of Lattice Structures, S. Kitipornchai, F. G. A. Al-Bermani and A. H. Peyrot, ST Aug. 94, p2281-2287.

The Effects of Bolt Over-Tightening on Bolted Connections Edition, S. Schmedkener Pichard I. Nielsen and

tions, Edwin R. Schmeckpeper, Richard J. Nielsen and Guy Gentry, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p713-718.

Focusing on Fatigue, Peter B. Keating, CE Nov. 94, p54-

Fracture Analysis of Bolted Timber Connections, Ian Smith and Lin J. Hu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p912-917.

Changing Conditions and Water Elections, Charles H. Lawrance, James M. Stubchaer and Jon A. Ahlroth, WR July/Aug. 94, p458-475.

Bond stress

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Behavior of Graphite/Epoxy Concrete Composite Beams, M. Saiidi, F. Gordaninejad and N. Wehbe, ST Oct. 94, p2958-2976. Bonded Tendon Debate, Morris Schupack, CE Aug. 93,

The Chemistry of MDF Materials, M. R. Silsbee and D. M. Roy, (Cement Manufacture and Use, Paul W. Brown,

ed., 1994), p193-209.

Induction Heating for Rehabilitation of Steel Structures Using Composites, Pierre E. Bourban, Erdal Karamuk, Roderic C. Don and John W. Gillespie, Jr., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p287-294.

Modeling Fracture in Cemented Granular Materials, B. C. Trent and L. G. Margolin, (Fracture Mechanics Applied

to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p54-69. Simplified Calculation Method for Force Transfer in Composite Columns, Jan A. Wium and Jean-Paul Lebet, ST Mar. 94, p728-746. Structural Characteristics of the Danby Pipe Renovation

System, Shuaib Ahmad and George McAlpine, (Infra-structure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p239-246.

Surface Preparation of Steel for Adhesive Bonding in Rehabilitation Applications, Steven H. McKnight, Pierre E. Bourban, John W. Gillespie, Jr. and Vistasp M. Karbhari, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1148-1155.

Bonding strength

Aging Effect on Bond Strength in Composite Sections, Yasser M. Hunaiti, MT Nov. 94, p469-473.

Bond Strength of Welded Wire Fabric in Concrete Bridge Decks, Bilal M. Ayyub, Naji Al-Mutairi and Peter Chang, ST Aug. 94, p2520-2531.

Carbon and Steel Microfiber-Reinforced Cement-Based Composites for Thin Repairs, Nemkumar Banthia and Sylvie Dubeau, MT Feb. 94, p88-99.

Concrete Beams with Externally Bonded Crabon Fiber Reinforced Plastic (CFRP) Strips, R. L. Sierakowski, C. A. Ross, J. W. Tedesco and M. L. Hughes, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p139-146.

Determination of Interfacial Debond Mode for Fiber-Reinforced Cementitious Composites, Victor C. Li and Yin-Wen Chan, EM Apr. 94, p707-719.

Pullout of Inclined Fibers from Cementitious Matrix, C. Ouyang, A. Pacios and S. P. Shah, EM Dec. 94, p2641-

Bonds, contracts

County Must Ensure Surety is Sound, CE Feb. 94, p27.

Courts Claim Surety is Sure Thing, CE Jan. 94, p27.

Predicting Construction Contract Surety Bond Claims Using Contractor Financial Data, Gordon D. Severson, Jeffrey S. Russell and Edward J. Jaselskis, CO June 94, p405-420.

Border irrigation

Correct Form of Hall Technique for Border Irrigation Advance, A. Al-Azba and T. Strelkoff, IR Mar./Apr. 94, p292-307.

Simple Method for Identification of Border Infiltration and Roughness Characteristics, John D. Valiantzas, IR Mar./ Apr. 94, p233-249.

Bored piles

Settlement Analysis for 450 Meter Tall KLCC Towers, Clyde N. Baker, Jr., Ir. Tarique Azam and Len S. Joseph, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1650-1671.

Borehole geophysics

A Borehole Instrumentation Program for Characterization of Unsaturated-Zone Percolation, Jack Kume and Joseph P. Rousseau, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Commit-

tee, 1994), p2076-2083.

Characterization of a Desert Soil Sequence at Yucca Mountian, NV, William R, Guertal, Alan L, Flint, Lon L. Hofmann and David B. Hudson, (High Level Radioactive Waste Management, High Level Radioactive Waste

Program Committee, 1994), p2755-2763.

Results of Prototype Borehole Instrumentation at the Hy-drologic Research Facility, Area 25, NTS, Joseph P. Rousseau, Mark Kurzmack and Alison Greengard, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2764-

Boreholes

Applications of Multi-mode Imaging to Multiple Offset Rousseau, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2797-2803.

Borehole Fluid Dynamic Temperature Logging to Evaluate Fracture Hydraulic Properties, C.-F. Tsang, F. V. Hale, P. Bluemling and S. Vomvoris, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p2655-2659.

Integrated Geology and Preliminary Cross Section Along the North Ramp of the Exploratory Studies Facility, Yucca Mountain, D. C. Buesch, R. P. Dickerson, R. M. Drake and R. W. Spengler, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1055-1065. Properties of Soundless Chemical Demolition Agents, Jim-

mie Hinze and James Brown, CO Dec. 94, p816-827.

Results of Air-Permeability Testing in a Vertical Borehole at Yucca Mountain, Nevada, G. D. LeCain and J.N. Walker, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2782-2788.

Saturation Levels and Trends in the Unsaturated Zone, Yucca Mountain, Nevada, Philip H. Nelson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2774-2781.

Tracking and Steering Systems in Trenchless Construction, R. Tanwani and D. T. Iseley, CO Mar. 94, p65-76.

Tunnel Boring Machine for Nuclear Waste Repository Research Project, Hans A. Janzon, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p403-410.

A Tunnel Boring System for the Yucca Mountain Project, Steven N. Short, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Com-

mittee, 1994), p381-385.

Boston's Backup Water Supply, Lawrence J. Bergen, CE Mar. 94, p66-68.

Boston's Commuter Comeback, Lawrence A. Williamson, CE Jan. 94, p66-69.

Central Artery Vent Shaft Will Come Wrapped, CE May 94, p25,27

Control of Odor and VOC Emissions at Wastewater Treatment Plants -Boston Harbor Case Study-, Robert Getter, Cheryl Breen and Mark Laquidara, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p548-555.

and Mare Edwards, ed., 1994), p348-353.
Deep Dig, Tight Squeeze, Joseph C. Clougherty, Richard F. O'Brien and Mark W. Pelletier, CE Aug. 94, p42-45.
Environmental Monitoring and Mitigation: Harbor Tunnel Dredging and Disposal Operations, Boston, Massachusetts, Curtis A. Meininger and Alan D. Randall, (Dredging) and Company of the Comp ing '94, E. Clark McNair, Jr., ed., 1994), p1471-1480.

Rock Anchors Keep 'Boat' From Falling, CE Dec. 94, p11. Start-ups, CE Sept. 94, p8.

State of the Harbor May Be Improving, CE Nov. 94, p8.

Algorithm for Precise Drainage-Basin Delineation, E. James Nelson, Norman L. Jones and A. Woodruff Miller, HY Mar. 94, p298-312.

Axisymmetric Time-Domain Transmitting Boundaries, Andrew John Deeks and Mark Felton Randolph, EM Jan.

94, p25-42.

Demand/Supply Relationship in Transportation Network Design Problems: A Genetic Algorithm Approach, Yihua Xiong and Jerry B. Schneider, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p938-941.

Boundary conditions

Asymmetric Flow into Well by Finite Elements, Kamala K. Singh and Shambhu P. Dasgupta, IR May/June 94, p520-533.

Boundary Conditions and Flow Patterns in a Mountain River, Andrew J. Miller, Diane M. L. Mas, James A. Smith and Wei-Hao Chung, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p762-766.

Buckling Mode Change of Antisymmetric Angle-Ply Laminates, Wen-Chi Chen, EM Mar. 94, p661-669

Circulation and Flushing in Casco Bay, Maine, Bin Gong and Bryan R. Pearce, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1039-1046.

Consolidation of Clay Layer: Hydrogeologic Boundary Conditions, Robert L. Schiffman, John M. McArthur and Robert E. Gibson, GT June 94, p1089-1093.

Depth-Averaged Flow Model in Curvilinear Coordinates, Hector R. Bravo, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

Dynamic Analysis of a High Speed Transport Model by Using a Piecewise Continuous Timoshenko Beam Model, Ji Yao Shen and William M. McGinley, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p27-36.

Effect of Boundary Conditions on Buckling of Friction Piles, Mohammed A. Gabr, Jibai Wang and Sam A. Kiger, EM June 94, p1392-1400.

GDE: New Approach to Graphical Modeling, M. Krzac-zek, CP Jan. 94, p103-124. The Influence of Boundary Conditions on Beach Zonation,

Ignacio Alonso and Federico Vilas, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicho-

las C. Kraus, ed., 1994), p417-431. The Influence of Engineering Judgement in the Settlement Analysis of a Test Fill Near Châlon-sur-Saône, France, Jean-Pierre Demartinecourt and Jean-Pierre Rajot, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p897-910.

Kent, Edward, John Richardson and Vijay Panchang. (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p56-60.

Mechanical Behavior of Dowels Embedded in Concrete, Luigi Biolzi and Natalino Gattesco, (Structures Con gress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p630-635.

Modeling Regional Flow and Flow to Drains, G. M. Pohll and J. C. Guitjens, IR Sept./Oct. 94, p925-939.

Radionuclides Migration in Fractured Porous Rock: Analytical Solutions for Various Boundary Conditions, Shih-Hai Li and Shean-Lang Chiou, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1344-1349.

Reconstruction of Concentration Boundary Condition for Unsteady Pesticide Transport Modeling, Deborah J. Mossman and Nael Al Mulki, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p160-164.

Stability Analysis of Rayleigh-Benard Convection in the Presence of Side Walls, P. Diplas and C. Dietz, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p82-86.

Water Quality Enhancement Technology for River-Reservoir Systems, John S. Gulliver and Steven C. Wilhelms, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1331-

Boundary element method

Analysis of Embedded Foundations by Substructure-Deletion Method, R. Betti and A. M. Abdel-Ghaffar, EM June 94, p1283-1303

Combined Boundary Element / Finite Strip Analysis of Bridges, M. S. Cheung, Georges Akhras and W. Li, ST Mar. 94, p716-727.

Constitutive Model for Viscoelastic-Fluid Dampers, Nicos Makris, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p857-862.

Dynamic Green's Functions of Homogeneous Poroelastic Half-Plane, T. Senjuntichai and R. K. N. D. Rajapakse,

EM Nov. 94, p2381-2404.

Experimental Verification of Numerical Model for Nonlinear Wave Evolutions, Takumi Ohyama, Serdar Beji, Kazuo Nadaoka and Jurjen A. Battjes, WW Nov./Dec. 94, p637-644.

Fracture Mechanics Analysis of Welded Joints Using Boundary/Finite Element Alternating Methods, Ruijia Mu and D. V. Reddy, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1920-1927.

Kinematics of Wave Overtopping on Marine Structure, J. J. Lee, F. Zhuang and C. Chang, (Ocean Wave Measure-ment and Analysis, Orville T. Magoon, ed. and J. Mi-chael Hemsley, ed., 1994), p821-834.

Large Deflection of Imperfect Plates by Iterative Be-Fe

Method, Jianqiao Ye, EM Mar. 94, p431-444.
Plane Orthotropic Laver by Transfer Matrix-Spline Boundary Element, L. Z. Jiang and J. S. Lee, EM May 94, p1026-1041.

Shoaling of Solitary Waves on Plane Beaches, S. T. Grilli, R. Subramanya, I. A. Svendsen and J. Veeramony, WW

Nov./Dec. 94, p609-628.

Stochastic Analysis of Ground-Water Flow in Semi-confined Aquifer, Mysore G. Satish and Jianting Zhu, HY Feb. 94, p147-168.

Thermal Stresses in Piezoelectric Materials: A Boundary Integral Formulation, J. S. Lee and L. Z. Jiang, (Engi neering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994),

Water Waves Above Submerged Porous Plate, Xiping Yu and Allen T. Chwang, EM June 94, p1270-1282.

Boundary layer

Air Entrainment and Bubble Behavior in Plunge Pools, Boualem Hadjerioua, Emmett M. Laursen, Margaret S. Petersen and Tony A. Rizk, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p989-993.

Characteristics of Supercritical Flow below Sluice Gate, Iwao Ohtsu and Youichi Yasuda, HY Mar. 94, p332-

Computation of Turbulent Shear Flow Over Surface-Mounted Obstacle, Jianming He and Charles C. S. Song, EM Nov. 92, p2282-2297.

Effect of Roughness and Thickness of Biofilms on External Mass Transfer Resistance, Tian C. Zhang, Paul L. Bishop and James T. Gibbs, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p593-600.

Hydrodynamics of Random Wave Boundary Layers, B. A. O'Connor, H. Kim and J. J. Williams, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p879-893.

Observations on the Growth of an Internal Boundary Layer with a Lidar Technique, Chia R. Chu, Marc Parlange, William Eichinger and Gabriel Katul, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p519-529.

Sediment Suspension Events and Shear Instabilities in the Bottom Boundary Layer, D. L. Foster, R. A. Holman and R. A. Beach, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p712-726.

Sediment Transport Measurements in Combined Wave-Current Flows, I. Katopodi, J. S. Ribberink, P. Ruol and C. Lodahl, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed.,

1994), p837-851.

Shingle Movement Under Waves & Currents: An Instrumented Platform for Field Data Collection, George Voulgaris, Michael P. Wilkin and Michael Collins, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p894-

Boundary processes

Boundary Forcing and a Dual-Mode Calculation Scheme for Coastal Tidal Models Using Step-Wise Bathymetry, James K. Lewis, Y. Larry Hsu and Alan F. Blumberg, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p422-

Boundary shear

Boundary Shear in the Vicinity of River Banks, Donald W. Knight and Shuyou Cao, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p954-958.

Distribution of Shear Force on Boundary of Smooth Rectangular Duct, David G. Rhodes and Donald W. Knight,

HY July 94, p787-807.

Estimating Local Bed Shear Stress in Large Gravel-Bed Rivers, Peter R. Wilcock, Alan F. Barta and Conor C. C. Shea, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p834-838.

Hydrodynamics of Random Wave Boundary Layers, B. A. O'Connor, H. Kim and J. J. Williams, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p879-893.

The Transport of Gravels in Boulder-Bed Streams, Alan F. Barta, Peter R. Wilcock and Conor C. C. Shea, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p780-784.

Bounding surface

Prediction of Settlement for Five Footings, Ameir Altaee and Bengt H. Fellenius, (Predicted and Measured Be-havior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p206-

Unified Critical-State Bounding-Surface Plasticity Model for Soil, Roger S. Crouch, John P. Wolf and Yannis F. Dafalias, EM Nov. 94, p2251-2270.

Vibration of Foundations on Incompressible Soils with No Elastic Region, Ronaldo I. Borja and Wen-Hwa Wu, GT Sept. 94, p1570-1592.

Acoustic Emission Monitoring of Fatigue Crack Growth in HSLA-80 Steel Box Beams, Stephen Pessiki and Steven Derrah, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1334-1339.

FRP Box-Beams Under Long-Time Static and Fatigue Loading, Urs Meier, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p411-416.

Response of Stressed Timber T - and Box-Beam Bridges, Hota GangaRao, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p701-706.

Box columns

Externally Stiffened I-Beam to Box-Column Connections, E. Shanmugam, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p719-724.

Rotational Centers of Plates Regulating Distortion of Box Girders, Tsuneo Usuki, ST Sept. 94, p2602-2622.

Estimating Basal-Heave Stability for Braced Excavations in Soft Clay, A. T. C. Goh, GT Aug. 94, p1430-1436.

Behavior of Gypsum-Sheathed Cold-Formed Steel Wall Studs, Thomas H. Miller and Teoman Pekoz, ST May 94, p1644-1650.

Common Causes of Collapse of Metal-Plate-Connected Wood Roof Trusses, Harvey A. Kagan, CF Nov. 93, p225-234.

Cross Bracings in Tapered Systems: Semirigid Ends, Robert Levy, Fred Segal and Avigdor Rutenberg, EM Aug. 94, p1803-1818.

Design of Imperfect Cross-Bracings, Fred Segal, Robert Levy and Avigdor Rutenberg, EM May 94, p1057-1075. Design Strengths of Cold-Formed Channels in Bending and Torsion, K. T. Kavanagh and D. S. Ellifritt, ST May

94, p1599-1607.

Elastic Buckling Strength of Gusset Plate Connections, J. J. Roger Cheng, Michael C. H. Yam and S. Z. Hu, ST Feb. 94, p538-559.

Grout Repair of Dented Offshore Tubular Bracing— Experimental Behavior, James M. Ricles, Troy E. Gillum and William Lamport, ST July 94, p2086-2107.

Lateral Bracing Criteria of the Composite Braces, Kazuo Inoue, Yasuo Higashibata and Kazuhiro Inoue, (Struc-tures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p152-157.

One Ninety One Peachtree and NationsBank: Composite Additions to the Atlanta Skyline, P. V. Banavalkar and J. P. Colaco, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p170-175.

Seismic Strengthening of URM Buildings with Steel Bracing, Durgesh C. Rai, Subhash C. Goel and William T. Holmes, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p809-814.

Brackish water

Brackish Groundwater and Urban Runoff: Source of Sup-ply or Source of Problems? William R. Everest and Richard A. Reynolds, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p770-773.

Interface Shear Stress in Overlaid Concrete Pavements, C.
M. Lau, T. F. Fwa and P. Paramasivam, TE Mar./Apr.
94, p163-177.

Bray, Oscar

Oscar Bray, ASCE Past President, Dies at 88, CE Mar. 94, p74.

Building Performance Founded on an Improved Sand in Recife, Brazil, J. F. T. Jucá, A. O. C. Fonte and I. D. S. Pontes Filho, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1202-1213.

The Inflation Equation, Joao Otavio Brizola and Paul C. Dinsmore, WP Special issue 94, p41-44.

Two Case Studies of Marine Parks & Marinas as Economic and Tourism Activity Stimulators in Brazil, Claudio Brasil do Amaral and John C. Corrough, (), p565-576.

Wave Height From Deep Water Through Breaking Zone, J. William Kamphuis, WW July/Aug. 94, p347-367.

Advances in 3D Modelling of Wave-Driven Currents, Philippe Péchon, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p366-375.

Breaking Wave Measurement by a Void Fraction Technique, Ming-Yang Su and John Cartmill, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p951-962.

Breaking Wave Persistence in Parametric Surf Zone Models, Howard N. Southgate and Helen M. Wallace, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p543-

Comparison of a Wave Transformation Model with LIPon particular of a wave transformation Model with Lift-11D Data, Francisco J. Rivero, Agustín S.-Arcilla and Dénes Beyer, (*Coastal Dynamics '94*, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p518-532

A Comparison of Wave Statistics in Uni- and Multidirectional Shoaling Seas, Andrew M. Cornett and Okey G. Nwogu, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p458-473.

Crest-Breaking Time-Lapse Approach for Measuring Breaker Angle, P. Chandramohan, B. U. Nayak and N. M. Anand, WW May/June 94, p318-324.

Cross-Shore Sand Transport Under Random Waves at SU-PERTANK Examined at Mesoscale, Magnus Larson and Nicholas C. Kraus, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p204-219.

Decay of Random Waves on Non-Monotonic Profiles, Magnus Larson, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed.,

1994), p503-517.

Evaluation of Depth-Limited Wave Breaking Criteria. George M. Kaminsky and Nicholas C. Kraus, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p180-193.

Evolution of Breaking Directional Spectral Waves in the Nearshore Zone, H. Tuba Özkan and James T. Kirby, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p849-

Experimental Study of Three-Dimensional Wave Breaking, . She, C. A. Greated and W. J. Easson, WW Jan./Feb. 94, p20-36.

Experimental Study of Undertow and Turbulence Intensity Under Irregular Waves in the Surf Zone, Nels J. Sultan and Francis C. K. Ting, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p602-613.

High-Resolution Measurements of Sand Suspension by Plunging Breakers in a Large Wave Channel, William R. Pally and Stephen F. Barkaszi, Jr., (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p263-277.

Irregular Wave Overtopping of Revetments in Surf Zones, Nobuhisa Kobayashi and Andrew W. Raichle, WW Jan./Feb. 94, p56-73.

Laboratory Experiment of Longshore Bars Produced by Breaker-Induced Vortex Action, Da Ping Zhang, Tsuguo Sunamura, Shigenobu Tanaka and Koji Yamamoto, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p29-43.

Nearshore Breaking Waves: A Numerical Model, Scott L. Douglass and Juan C. Ortiz, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p864-879.

Nonlinearity in Wave Crest Statistics, David L. Kriebel and Thomas H. Dawson, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p61-75.

Numerical Model of the Longshore Current on a Barred Beach, Jane McKee Smith, Magnus Larson and Nicholas C. Kraus, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p798-812

On Some Hydrodynamic Effects Found in Large Scale Experiments, Nikolai S. Speranski, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p785-793.

Scale Effect on Impulsive Wave Forces and Reduction by Submerged Breakwater, Tsutomu Sakakiyama and Masaharu Ogasawara, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p628-641.

Shoaling of Solitary Waves on Plane Beaches, S. T. Grilli, R. Subramanya, I. A. Svendsen and J. Veeramony, WW

Nov./Dec. 94, p609-628.

Shoaling of Wave Spectra in Front of Reflective Structures, Ernest R. Smith and Steven A. Hughes, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and

J. Michael Hemsley, ed., 1994), p642-656.

Short and Long Wave Transformation Modelling in a Large Scale Flume, Luc Hamm and J A. (Dano) Roel-vink, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p503-

Spectral Boussinesq Modelling of Breaking Waves, J. A. Battjes, Y. Eldeberky and Y. Won, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Mi-

chael Hemsley, ed., 1994), p813-820.

Surf-Similarity Parameter for Breaking Solitary-Wave Runup, Nobuhisa Kobayashi and Entin A. Karjadi, WW

Nov./Dec. 94, p645-650.

A Surfzone Parameter Sensitivity Analysis on LIP11D Suspended Sediment and Return Flow Measurements, G. Mocke, A. Reniers and G. Smith, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p571-585.

Wave Runup on Smooth and Rock Slopes of Coastal Structures, Jentsje W. van der Meer and Cor-Jan M. Stam, WW Sept./Oct. 92, p534-550.

Wave Transformation Measurements at SUPERTANK, David L. Kriebel and Jane M. Smith, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p233-247.

Wave-Height Distribution in Storm Sea: Effect of Wave Breaking, Malcolm O. Green, WW May/June 94, p283-

Brief History of the Port of Sines and General Presentation of West Breakwater, Manuel Dinis C. Dias and Jeno F. Toppler, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p3-24.

Characteristics of Solitary Wave Breaking Induced by Breakwaters, Stéphan T. Grilli, Miguel A. Losada and Francisco Martin, WW Jan./Feb. 94, p74-92.

Coastal Groins and Nearshore Breakwaters, U.S. Army Corps of Engineers, 1994, 0-87262-998-8, 90pp.

Dredged Material Used in Sand-filled Containers for Scour and Erosion Control, Lee E. Harris, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p537-546.

Evaluations and Revisions of the Design, F. Abecasis and C. Pita, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p302-326.

The Evolution of Breakwater Design, Billy L. Edge, Orville T. Magoon and William F. Baird, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p1024-1039.

- An Experimental and Analytical Study of the Shoreline Response to Non-Parallel Breakwaters in Oblique Waves, Michael E. McCormick and Richard W. Gordon, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p251-
- Following the Geotechnical Studies of the West-Breakwater at Sines; Hydro-Geotechnical Stability of Breakwaters, Frans B. J. Barends and Jack Hagenaar, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p124-167.
- Influence of Wave Groups on Stability of Berm Breakwaters, Kevin R. Hall, WW Nov./Dec. 94, p630-636.

- Kinematics of Wave Overtopping on Marine Structure, J. J. Lee, F. Zhuang and C. Chang, (Ocean Wave Measure-ment and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p821-834.
- King Harbor Mole Repair Redondo Beach, California, Clark B. Adams, (Marinas, Parks and Recreation Devel-opments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p283-291.
- Modeling Impact of Armour Blocks, M. A. G. Silva, (Reconstruction of the West Breakwater at Port Sines, Por-tugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p187-204.
- Molhe Oeste Do Porto De Sines Reabilitação Definitiva Fiscalização Da Construção, Joaquim da Silva Pinto, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p229-264.
- OTF Kinematic GPS Positioning for Vertical Reference Datum, Al Rougeau, Dean Pottle and Larry Rosenbalm, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p288-
- Overview of the Sines West Breakwater Reconstruction, Orville T. Magoon, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p1-2.
- Performance Evaluation of Offshore Breakwaters a Field and Computational Study, Andrew J. Chadwick, Christoper Fleming, Jonathan Simm and Geoffrey N. Bullock, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p950-
- Physical Model Tests of Dolos Impact Stresses, J. M. Stallings and J. W. Tedesco, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p67-72
- Port of Sines West Breakwater Rehabilitation Repair Works (1990 1992), Carlo Alberto Segarelli, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p205-228.
- Port of Sines West Breakwater Rehabilitation Strategy Selected, Manuel Dinis C. Dias, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p25-34.
- Protecção Provisória do Molhe Oeste do Porto de Sines, Fausto Gonçalves Henriques and Ismael Byscaia de Carvalho, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p35-53.
- Reflection and Transmission of Water Wave by Porous Breakwater, L. H. Huang and H. I. Chao, WW Sept./Oct. 92, p437-452.
- Scale Effect on Impulsive Wave Forces and Reduction by Submerged Breakwater, Tsutomu Sakakiyama and Masaharu Ogasawara, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p628-641.
- Shoaling of Wave Spectra in Front of Reflective Structures, Ernest R. Smith and Steven A. Hughes, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p642-656.
- Short Synthesis of Some Studies Carried Out for the Repairing of Sines Port West Breakwater, G. Paolella and S. Corsini, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p70-98.
- Sines Breakwaters Monitoring Program, C. Pita, F. Abecasis and A. Fernandes, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p408-427.

Sines West Breakwater Emergency Repair, Hydraulic Studies, H. Ligteringen, J. W. van der Meer and M. Rita, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE. 1994), p99-123.

Study on the Sand Deposited Behind the Detached Break-waters, Wen-Juinn Chen and Ching-Ton Kuo, (Coastal

Dynamics '94, A. S. Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p938-949. Temporary Protection of the West Breakwater of the Port of Sines, Fausto Goncalves Henriques and Ismael Byscaia de Carvalho, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p54-69.

Wave Impacts on Sea Walls and Breakwaters, A. R. Craw ford, M. J. Walkden, P. A. D. Bird, G. N. Bullock, P. J. Hewson and J. Griffiths, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C.

Kraus, ed., 1994), p656-670.

Wave Interaction with Semijorous Cylindrical Breakwater, M. K. M. Darwiche, A. N. Williams and K.-H. Wang, WW July/Aug. 94, p382-403.
Wave Measurement Near Reflective Structures, P. A. D.

Bird, M. A. Davidson, G. N. Bullock and D. A. Huntley, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p701-711

Wave Motion Through Porous Structures, Xiping Yu and

Allen T. Chwang, EM May 94, p989-1008. Wave Reflection: Field Measurements, Analysis and Theoretical Developments, Mark A. Davidson, Paul A. D. Bird, Geoff N. Bullock and David A. Huntley, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p642-655.

Wave Transformation and Load Reduction Using a Small Tandem Reef Breakwater - Physical Model Tests, Andrew Cornett, Etienne Mansard and Edgar Funke, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p1008-1023.

Wave-Induced Forces on Armor Unit on Berm Breakwaters, Alf Tørum, WW May/June 94, p251-268.

Wave-Induced Oscillation in Harbor with Porous Breakwaters, Xiping Yu and Allen T. Chwang, WW Mar./Apr.

94, p125-144.

West Breakwater Maintenance, H. Ligteringen and Fernan do A. S. Oliveira, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p428-439.

West Breakwater of the Port of Sines Final Rehabilitation Inspection of the Construction, Joaquim da Silva Pinto, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p265-301.

West Breakwater Rehabilitation and Construction Supervision, Fernando A. S. Oliveira and H. de Jong, (Recon struction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994),

p327-407.

p321-407.
West Breakwater Sines Definitive Rehabilitation, General Concept, H. Ligteringen, F. Silveira Ramos, J. W. van der Meer and M. Rita, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Physician of ASCE 1904. p168. 196 and Ocean Division of ASCE, 1994), p168-186.

ASCE Elevates 13 of Its Own to Honorary Membership, NE May 94, p3.

Atlanta Ceremony Celebrates 13 New Honorary Members of ASCE, NE Dec. 94, p2-3.

Dynamic Testing of Unreinforced Brick Masonry Infills, Ghassan Al-Chaar, Richard Angel and Daniel P. Abrams, Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p791-796.

Floor to Wall Anchors in Historic Brick Buildings, W. Bradford Cross and Nicholas P. Jones, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1569.

Sensing and Control for Robotic Masonry, Rami A. Rihani and Leonhard E. Bernold, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer.

ed., 1994), p410-418. Stress-Strain Curves for Brick Masonry in Biaxial Compression, Krishna Naraine and Sachchidanand Sinha, ST June 92, p1451-1461.

Void Mortar Joints: Bane of Brick Masonry, Clayford T. Grimm, CO Mar. 94, p152-161.

Construction of Large Lunar Structures by Fusion Welding of Sintered Regolith, R. S. Crockett, B. D. Fabes, T. Nakamura and C. L. Senior, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1116-1127.

Sintering Bricks on the Moon, Carlton C. Allen, John C. Conf. and Devid S. McKey, (Engineering, Conf.)

Graf and David S. McKay, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed.

and Stanley Lokaj, ed., 1994), p1220-1229.

Thermal Conductivity of Earth Blocks, Joe O. Akin-musuru, MT Aug. 94, p341-351.

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Settlement and Deformation Response of a Bridge Footing on a Sloped Fill, Guy Y. Félio and Gunther E. Bauer, CVertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1071-1081.

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Blast Densification of a Thick, Loose Debris Flow at Mt. St. Helen's., Washington, Joseph E. Hachey, Robert L. Plum, R. John Byrne, Alan P. Kilian and David V. Jenkins, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p502-512.

Effect of Orientation of Approach Slabs on Pavement De-formation, H. K. W. Wong and J. C. Small, TE July/Aug.

94, p590-602.

Numerical Modeling of Bridge Approach Settlement with Foundation-Embankment Interaction, Musharraf Zaman, Dinesh Bhat and Joakim Laguros, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1400-1414.

Settlement Measurements of 50-ft High Embankments at the Chesapeake & Delaware Canal Bridge, Ed Brylawski, Poh C. Chua and Edward S. O'Malley, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1149-1163.

Bridge construction

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BRICAL: A Multimedia Intelligent Educational System for Bridge Engineering, Amin Hammad and Yoshito Itoh, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1671-1678.

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Construction of the Clark Cable-Stayed Bridge at Alton, Illinois, David Goodyear and Ralph Salamie, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p672-676.

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Greenwald, CE May 94, p64-67.

Monitoring Stay Cable Forces During Construction of the

Natchez Trace Parkway Arch Bridge, Allan Brayley, Brett Commander and Jeff Schulz, (Structures Congress XII. N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p278-283.

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Puerto Rico Privatizes the Roads, Jack S. Schnettler, CE

Feb. 94, p56-58. A Study of Jointless Bridge Behavior, D. Siros and C. Spy-

rakos, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p485-490.

The Tatara Bridge - World's Longest Cable-Stayed Span, Manabu Ito and Takeo Endo, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p677-682

This Project's for You, CE Apr. 94, p8.

Wind Effects and Countermeasures During Erection of a Cable-stayed Bridge, S. G. Arzoumanidis, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p881-886.

Wind Studies of the Owensboro Bridge, Kentucky, P. A. Irwin, V. Chandra, J. Xie and G. K. Stone, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p887-893.

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AISI-FHWA Model Bridge Test, Mark Moore, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1065-1070.

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Seismic Analysis of Bridges: Simplified or Refined Approach, Y. Chen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p79-84.

Splicing Strength of Welded Steel Mesh in Concrete Bridge Decks, Bilal M. Ayyub, Naji Al-Mutairi and Peter Chang, ST Aug. 94, p2532-2546.

Talmadge Bridge Replacement, Michael Abrahams and Man-Chung Tang, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p182-187.

The Use of Type K Expansive Cement Concrete for New Construction and Rehabilitation of Concrete Bridge Decks, Kenneth A. Herr and Robert T. Barclay, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p955-962.

Welded Wire Fabric for Bridges II. : Fatigue Strength, Bilal M. Ayyub, Peter C. Chang and Naji A. Al-Mutairi, ST June 94, p1882-1892.

Welded Wire Fabric for Bridges. I: Ultimate Strength and Ductility, Bilal M. Ayyub, Peter C. Chang and Naji A. Al-Mutairi, ST June 94, p1866-1881.

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Aesthetic Issues in Timber Bridges, Frederick M. Law, (Structures Congress XII, N. C. Baker, ed. and Barry J.

Loodno, ed., 1994), p1268-1273. Analysis of I-Girder Highway Bridges, Kassim M. Tarhini, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p684-687.

BRICAL: A Multimedia Intelligent Educational System for Bridge Engineering, Amin Hammad and Yoshito Itoh, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1671-1678.

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Design of Box Girder Bridges by Nonlinear Theory, Ahmad Salahuddin, (Structures Congress XII, N. C. Baker,

ed. and Barry J. Loodno, ed., 1994), p491-496.

The Development of an Expert System Used in Preliminary Design of Concrete Bridges, Nicolaas Stuurstraat and Cornelis van der Veen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p909-912.

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ESPADD.BR: Expert System Producing Automated De-signs and Drawings for Bridges, Charles Tung and Louis Berger, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p913-921.

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Innovations in Major Suspension Bridge Design, Klaus H.

Ostenfeld, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p772-778.

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drzej S. Nowak, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p538-543. Machine Learning in Civil Engineering - Important Issues and Challenges, Benoît Julien, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p877-884.

geneering, Staath Stozenia, etc., 1979/), p877-004. New Bridge-Deck Design, ET June/July 94, p10. Nominations Sought for Bridge Awards, CE Aug. 94, p8. The Normandie Bridge, Michel Virlogeux, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

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Bridges, Alaa Helba and John B. Kennedy, ST May 94, p1415-1433

Pre-Engineered Short Span Steel Bridges, Camille G. Ru-beiz and Charles D. Gorman, (Structures Congress XII, Baker, ed. and Barry J. Loodno, ed., 1994), p1082-1087.

Seismic Evaluation of the Macy Street Bridge, Los Angeles, California, Using 3-D Nonlinear Pushover Methodologies, John C. Castro and Jason S. Maxwell, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1099-1105.

Person Study of a Cable-Stayed Bridge, K. C. Yiak and S. Pezeshk, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1197-1207.

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Bridge foundations

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Jacket Arrest Cracking of Prison Bridge Piles, CE Dec. 94, p14,16-17.

Bridge inspection Bridge Condition Rating Using Fuzzy Sets and an Eigenvector of Priority Settings, Hani G. Melhem and Senaka Aturaliya, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p.1908-1915.

Bridge Evaluation Using a Hybrid Information System, John L. Wilson and Stephanie J. Wagaman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1131-1136.

Expert System Bridges Inspection Information Gap, ET

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NDE for Steel Bridges: FHWA Research, Past, Present and Future, Steven B. Chase, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1060-1064. Plenty of this Sample to go Around, CE Oct. 94, p8

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Rehabbing Bridges Under Traffic, Rita Robison, CE Apr. 94, p44-47.

A Study of Jointless Bridge Behavior, D. Siros and C. Spyrakos, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p485-490.

Towards Structural Strength and Safety Evaluation Within Bridge Management Systems, George Hearn, Dan M. Frangopol and Milanendu Chakravorty, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p290-295.

Bridge tests

AISI-FHWA Model Bridge Test, Mark Moore, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1065-1070.

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Condition Assessment of Highway Bridges, Taner Aksel, Kuo-Liang Lee and Emin A. Aktan, (Structures Con-gress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1124-1130.

Instrumentation and Testing of a Three Hinge Arch for Service Loads Increase, John Choros, Eduardo Ramírez and Vinaya Sharma, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1106-1111.

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Aug. 34, p2536-273.
Application of the FESWMS-2DH Software to Solve the Navigation Problem at EL-Menya Bridge in Egypt, Khaled Kheireldin, Ahmed Fahmey and Mohamed Gasser, (Computing in Civil Engineering, Khalil ser, (Computing in Civil En Khozeimeh, ed., 1994), p1244-1250.

Applications of Field Testing to Bridge Evaluation, Fred Moses, Jean Paul Lebet and Rolf Bez, ST June 94,

p1745-1762

Biaxial Testing of Brittle Repair Material for Rigid Pavements, George Z. Voyiadjis and Taher M. Abu-Lebdeh, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p964-971. Bridge Designs Look to Future, Remember Past, CE Aug. 94, p12-13.

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Bridge Pier Scour Equations - An Assessment, Alimul Qadar and Sarfaraz A. Ansari, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p61-67.

Bridge Rail Impact Forcing Functions, Barry T. Rosson and Ronald K. Faller, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p91-96.

Bridge Scour During the 1993 Floods in the Upper Mississippi River Basin, Gordon G. Barksdale, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p21-25.

Bridge Scour Instrumentation, P. F. Lagasse, E. V. Richardson and S. A. Sabol, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p36-40.

A Bridge-Deck Deal Without Reinforcing Steel, ET Dec. 94/Jan. 95, p1,6.

Clear-Water Scour around Bridge Pier Group, Nandana Vittal, U. C. Kothyari and Morteza Haghighat, HY Nov. 94, p1309-1318

Collaboration in the Engineering Classroom, Patricia G. Frantz, Gregory C. Frantz and John T. DeWolf, El July 93, p297-303.

A Comprehensive Bridge Management System for Illinois, Allen R. Marshall, Todd Ahrens and Paul D. Thompson, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1859-1866.

Contract Awarded for Canadian Bridge, CE Jan. 94, p8. Demonstration Project for Scour Instrumentation, J. D. Schall, W. R. Ivarson and T. Krylowski, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p37-42.

Design & Construction of the Liberty Street Bridge Earth Support System, David R. Chapman, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994),

Design and Implementation of a Database for Seismic Evaluation of Structures, Steven E. Rahmann and Gregory L. Fenves, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p790-797. Developing Retrofit Strategies for the China Basin Viaduct Foundations Using Non-linear, Hysteretic Analysis, D. R. Parker, John C. Castro and R. A. Dameron, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1839-1845.

The Development, Installation, and Monitoring of Smart Bolts for Bridges, I. Wayne Wallace, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham,

ed., 1994), p1171-1178.

Different Approaches to Rating Slab Bridges, Vikas Huria, Kuo-Liang Lee and Ahmet E. Aktan, ST Oct. 94, p3056-3062.

Dynamic Interaction of Bridge and Moving Loading, A.
Al-Sewaadi and A. Fafitis, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla,

1993), p77-93.

Dynamic Loading of a Rigid Frame Bridge, Dongzhou Huang, Ton-Lo Wang and Mohsen Shahawy, (Structures Congress XII, N. C. Baker, ed. and Barry J. Lood-

no, ed., 1994), p85-90.

no, ed., 1994), poz-90.

Effect of Pier Geometry on Scour in Graded Gravels, Luis Ayala and Francisco Grandón, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p73-77.

Effects of Flow Duration on Local Scour at Bridge Piers in Naw York Gerard K. Burch and Richard Lumia (Hye.)

New York, Gerard K. Butch and Richard Lumia, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p46-50.

Expert System for Bridge Scour and Stream Stability, Suzanne Pollon, Lea Adams, Richard Palmer and George Turkiyyah, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1389-1396. Fatigue Strength of Weathered Rolled Beam Made of

A588 Steel, Pedro Albrecht and Camille Shabshab, MT

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Field Performance of an Acoustic Scour-Depth Monitoring System, Robert R. Mason, Jr. and D. Max Sheppard, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p366-375. Flexible Extracation of Practical Knowledge from Bridge

Databases, Yoram Reich, Steven J. Fenves and Eswaran Subrahmanian, (Computing in Civil Engineering, Khalil

Subtrannanian, (Computing in Civic Engineering, Stiaux Khozeimeh, ed., 1994), p1014-1021.

Flexural Member Bending Strength Limits in the New LRFD Bridge Code, Karl H. Frank, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p544-548.

Focusing on Fatigue, Peter B. Keating, CE Nov. 94, p54-

Heat-Straightening Repair of Damaged Steel, R. Richard Avent, (Infrastructure: New Materials and Methods of

Avent, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1194-1202. HEC River Analysis System (HEC-RAS), Vernon Bonner, Gary Brunner and Mark Jensen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p376-380. Historic Yorktown: New Bridge Keeps Old Design, Mi-chael J. Abrahams, CE Nov. 94, p46-47. Hydraulic Model Studies of Recessed Curb Inlets and Bridge Drains F. R. Holley, (Hydraulic Engineering

Bridge Drains, E. R. Holley, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p528-532.

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Impediments to the Implementation of Seismic Isolation, Ronald L. Mayes, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p128-133. Improved Hydraulic Features of the HEC River Analysis

(HEC-RAS), Gary W. Brunner and Steven S. Piper, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p502-506.

ISDP: Integrated Approach to Seismic Design of Reinforced Concrete Structures, William C. Stone and Andrew W. Taylor, ST Dec. 94, p3548-3566.

Kent, Edward, John Richardson and Vijay Panchang, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p56-60.

Looking for Solutions to the Lead-Paint Crisis, CE Aug.

94, p19,21.

Low-Cost Bridge Scour Measurements, J. D. Schall, J. R. Richardson and G. R. Price, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p114-118.

New Ultrasonic Device Sounds Out Bridges, ET Dec.

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Nonlinear Finite Element Analysis of Deteriorated RC Slab Bridge, B. M. Shahrooz, I. K. Ho, A. E. Aktan, R. de Borst, J. Blaauwendraad, C. van der Veen, R. H. Iding and R. A. Miller, ST Feb. 94, p422-440.

On the Erodibility of Rock and Other Earth Materials, George W. Annandale and Hendrik A. D. Kirsten, (Hy-draulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p68-72.

Overweight Trucks and Safety of Bridges, Gongkang Fu and Osman Hag-Elsafi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p284-289.

Practical Method for Calculating Contraction Scour, E. V. Richardson and J. R. Richardson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p6-10.

Prediction of Observed Bridge Response with Soil-Pile-Structure Interaction, N. Makris, D. Badoni, E. Delis and

G. Gazetas, ST Oct. 94, p2992-3011.

Prestress Force Effect on Vibration Frequency of Concrete Bridges, M. Saiidi, B. Douglas and S. Feng, ST July 94, p2233-2241.

Random Vibration of Beam under Moving Loads, Giuseppe Ricciardi, EM Nov. 94, p2361-2380.

Real-Time Data Collection of Scour at Bridges, David S. Mueller and Mark N. Landers, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p104-113.

Revised Hydraulic Design of the Rio Hondo Flood Control Channel, Scott E. Stonestreet, Michael E. Mulvihill and John E. Hite, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p401-

Seismic Isolation Retrofit of Existing Bridges, Ronald I Mayes, Deepak Choudhury, Robert S. Crooks, David M. Jones and Richard P. Knight, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1179-1186.

Seismic Response Control of Bridges by Variable Dampers, Kazuhiko Kawashima and Shigeki Unjoh, ST

Sept. 94, p2583-2601.

SemiActive Structural Control: A Low Cost Fix for An Infrastructure at Risk, C. C. Kuo, H. Wu, L. Liu, R.L. Sack, A. Ebrahimpour and W. N. Patten, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p387-392.

Sensitivity Analysis of Bridge Equations, Jeffrey S. Glenn, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p11-15.

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Testing and Predicting the Movement of a Drilled Shaft in New Mexico, Koon Meng Chua, Wimpie A.N. Aspar and Rober Meyers, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p279-290.

Theoretical and Experimental Evaluation of FRP Components and Systems, Sotiris N. Sotiropoulos, Hota V. S. GangaRao and Ahmed N. K. Mongi, ST Feb. 94, p464-485

Three-Way Trade Saves Historic Michigan Bridges, CE Nov. 94, p22,24.

Timber Pile Length Determination Using a Nondestructive Technique, Robert T. Brooks and Allan G. Burk, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p952-957.

Tolerable Deformations, Harvey E. Wahls, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1611-1628.

Towards Practical Machine Learning Techniques, Yoram Reich, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p885-892.

Two States make First Use of Bridge-Deck Technology,

CE Apr. 94, p10.

Ultimate Depth of Scour Around Bridge Piers, Sarfaraz A. Ansari and Alimul Qadar, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p51-55.

Validation of Knowledge-Based System with Multiple Bridge Rail Experts, Paul N. Roschke, TE Sept./Oct. 94,

Vibration Testing for Nondestructive Evaluation of Bridges. I: Theory, Mahmod M. Samman and Mrinmay Biswas, ST Jan. 94, p269-289.

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Biswas, ST Jan. 94, p290-306.

Bridges, arch

An Assessment of the Joint Factor as Used in the Modified MEXE Method, N. G. Gong and B. S. Choo, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p704-711.

Gateway to Columbus, John Hillman and Daniel K. Bur-

roughs, CE Dec. 94, p58-61.

Impulse Effect on Redundancy of a Tied-Arch Bridge, Leon L-Y. Lai, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p712-719.

Instrumentation and Testing of a Three Hinge Arch for Service Loads Increase, John Choros, Eduardo Ramirez and Vinaya Sharma, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1106-1111.

Monitoring Stay Cable Forces During Construction of the Natchez Trace Parkway Arch Bridge, Allan Brayley, Brett Commander and Jeff Schulz, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p278-283.

Retrofitted Bridge Quickly Tested by Quake, CE Mar. 94,

Seismic Evaluation of the Tied-arch Bridge Across the Mississippi River on I-40, W. David Liu, Roy A. Imbsen, Richard J. LeBeau, Farid S. Nobari and Lelio H. Mejia, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p355-360.

Spanning the Grand Canyon, Jerry A. Cannon and Robert D. Turton, CE Nov. 94, p38-41.

Bridges, box girder

Design of Box Girder Bridges by Nonlinear Theory, Ahmad Salahuddin, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p491-496.

Prestress Influence on Shear-Lag Effect in Continuous Box-Girder Bridge, Shih Toh Chang, ST Nov. 92, p3113-3121.

Bridges, cable-stayed

Advances in the Modelling of Long Span Bridges for Wind Effects, J. Peter C. King and Alan G. Davenport, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p875-880.

Cables Over the Mississippi, Ernst H. Petzold, CE Feb. 94, p62-65.

Case Study of Burlington Cable-Stayed Bridge, Kevin E. Swiggum, Stuart D. Anderson and Jeffrey S. Russell, CO Sept. 94, p649-666.

Construction of the Baytown Bridge, Houston, Man-Chung Tang, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p666-671.

Construction of the Clark Cable-Stayed Bridge at Alton, Illinois, David Goodyear and Ralph Salamie, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p672-676.

The Effect of Member Snap on Progressive Collapse of Space Structures, Nicholas F. Morris, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p17-31.

Estimation of Damping Ratio of Cable-Stayed Bridges for Seismic Design, Kazuhiko Kawashima, Shigeki Unjoh and Meguru Tunomoto, ST Apr. 93, p1015-1031.

Identification of Aeroelastic Parameters of Flexible Bridges, Partha P. Sarkar, Nicholas P. Jones and Robert H.

Scanlan, EM Aug. 94, p1718-1742. Modal Identification of Cable-Stayed Pedestrian Bridge, Mack G. Gardner-Morse and Dryver R. Huston, ST Nov. 93, p3384-3404.

Monitoring Stay Cable Forces During Construction of the Natchez Trace Parkway Arch Bridge, Allan Brayley, Brett Commander and Jeff Schulz, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p278-283

p. 20-203.
The New Clark Bridge: Saddle-Draped Cables, David Goodyear and Ralph Salamie, CE Aug. 94, p. 46-49.
The Normandie Bridge, Michel Virlogeux, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p660-665.

Robust Active Control of Cable-Stayed Bridge Subjected to Earthquake Ground Motion, Mario E. Magaña, Alan G. Hernried and Dietmar Scheer, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p317-326.

Seismic Study of a Cable-Stayed Bridge, K. C. Yiak and S. Pezeshk, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1197-1207.

Synthetic Wind for Investigations in Time-Domain, Imre Kovacs, (Structures Congress XII, N. C. Baker, ed. and

Barry J. Loodno, ed., 1994), p900-905. Talmadge Bridge Replacement, Michael Abrahams and Man-Chung Tang, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p182-187. The Tatara Bridge - World's Longest Cable-Stayed Span, Manabu Ito and Takeo Endo, (Structures Congress XII,

N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p677-682

Wind Effects and Countermeasures During Erection of a Cable-stayed Bridge, S. G. Arzoumanidis, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p881-886.

Wind Studies of the Owensboro Bridge, Kentucky, P. A. Irwin, V. Chandra, J. Xie and G. K. Stone, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p887-893.

Wind-Induced Nonlinear Lateral-Torsional Buckling of Cable-Stayed Bridges, Virote Boonyapinyo, Hitoshi Yamada and Toshio Miyata, ST Feb. 94, p486-506.

The World's Longest Cable-stayed Foot-Bridge Using Fiber Reinforced Plastics, Magdi A. Khalifa and Maher K. Tadros, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p207-214.

Bridges, cantilever

Monitoring Stay Cable Forces During Construction of the Natchez Trace Parkway Arch Bridge, Allan Brayley, Brett Commander and Jeff Schulz, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p278-283.

Talmadge Bridge Replacement, Michael Abrahams and Man-Chung Tang, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p182-187. Time-related Deflections of Cantilever Bridges, Cornelis

van der Veen, Marcel van Vliet and Ane de Boer, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p922-929.

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Parametric Study on Collapse Loads of Skew Composite Bridges, Alaa Helba and John B. Kennedy, ST May 94, p1415-1433.

Bridges, concrete

Analysis of a Concrete Cylinder with a Composite Hoop Wrap, Christopher P. R. Hoppel, Travis A. Bogetti, John W. Gillespie, Jr., I. Howie and Vistasp M. Karbhari, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p191-198.

Application of FRP Reinforcement in Structural Precast Concrete, T. Russell Gentry and Lawrence C. Bank, (In-frastructure: New Materials and Methods of Repair,

Kim D. Basham, ed., 1994), p575-582.

Bridge Rehabilitation Using Composite Materials, William W. Finch, Jr., Michael J. Chajes, Dennis R. Mertz, Victor N. Kaliakin and Ahmad Faqiri, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1140-1147.

Comparison of Bridge Deterioration Rates, David Veshosky and Carl R. Beidleman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p296-

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- Design Guidelines for the Use of Debonded Strands, Bruce W. Russell and Ned H. Burns, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p618-
- Destructive Testing of Decommissioned Concrete Slab Bridge, R. A. Miller, A. E. Aktan and B. M. Shahrooz, ST July 94, p2176-2198.
- Development Length of Uncoated Prestressing Strand, Susan N. Lane, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p624-629.
- The Development of an Expert System Used in Preliminary Design of Concrete Bridges, Nicolaas Stuurstraat and Cornelis van der Veen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p909-912.

Investments in the Future, James Denning, CE July 94,

Nonlinear Finite Element Analysis of RC Slab Bridge, Vi-kas Huria, Kuo-Liang Lee and A. Emin Aktan, ST Jan.

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Old Concrete Slab Bridges. II: Analysis, A. Azizinamini, Y. Shekar, T. E. Boothby and G. Barnhill, ST Nov. 94, p3305-3319.

Re-Repair of the Piedras Bridge in El Paso, Texas with a New Low Pressure Spray Applied Structural Repair Mortar System, Robert J. Gulyas and Robert Navarro, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p936-954.

Retrofitted Bridge Quickly Tested by Quake, CE Mar. 94, p12.

Seismic Response and Retrofitting of Non-Ductile Reinforced Concrete Bridges, James Ricles, Yueh-Shiun Yang and M. J. Nigel Priestley, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1226-1231

Seismic Retrofit of Existing Reinforced Concrete Columns by Glass-Fiber Composites, L. Jin, H. Saadatmanesh and M. R. Ehsani, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p753-763.

A Shear-Flexure Model for Non-Ductile Reinforced Concrete Bridge Columns under Biaxial Seismic Loading, Yueh-Shiun Yang, James Ricles and M. J. Nigel Priestley, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1232-1237.

Talmadge Bridge Replacement, Michael Abrahams and Man-Chung Tang, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p182-187.

Test for Polymer Overlay Interface on Concrete, Brian M. Deming, Haluk Aktan and Mumtaz Usmen, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p709-715.

Time-related Deflections of Cantilever Bridges, Cornelis van der Veen, Marcel van Vliet and Ane de Boer, (Comouting in Civil Engineering, Khalil Khozeimeh, ed., 1994), p922-929.

Unified Code Provisions for Concrete Bridges, Antoine E. Naaman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p555-560.

The Use of Type K Expansive Cement Concrete for New Construction and Rehabilitation of Concrete Bridge Decks, Kenneth A. Herr and Robert T. Barclay, (Infra-structure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p955-962.

Bridges, continuous

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Finite Element Modeling of Continuous Posttensioned Voided Slab Bridges, Rajan Sen, Mohsen Issa, Xianghong Sun and Antoine Gerges, ST Feb. 94, p651-

Bridges, girder

Analysis of I-Girder Highway Bridges, Kassim M. Tarhini, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p684-687.

Combined Boundary Element / Finite Strip Analysis of Bridges, M. S. Cheung, Georges Akhras and W. Li, ST Mar. 94, p716-727.

Computer Analysis of Continuous P/C Highway Bridge Girders with Variable Depth, Hani Melhem and Weigun Zhang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p696-703.

Continuity in Precast Prestressed Concrete Girder Bridges, O. Abdalla, J. A. Ramirez and R. H. Lee, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p479-484.

Design Guidelines for the Use of Debonded Strands, Bruce W. Russell and Ned H. Burns, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p618-

Moments in Deck Slabs Due to Cantilever Loads, Aftab A. Mufti, Baidar Bakht and Leslie G. Jaeger, ST June 93, p1761-1777.

Nebraska Builds First Metric Bridge in U.S., NE Oct. 94,

Simple Live Load Distribution Factors for Girder Bridges, Sami W. Tabsh, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p497-502.

Ultimate Load Test of Slab-on-Girder Bridge, Bai Bakht and Leslie G. Jaeger, ST June 92, p1608-1624.

Bridges, highway

Analysis of I-Girder Highway Bridges, Kassim M. Tarhini, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p684-687.

Application of Field Data to Serviceability and Life Predic-tion of Highway Bridges, Jamshid Mohammadi, Sidney A. Guralnick and Ramakrishna Polepeddi, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1089-1096.

Attempts to Introduce New Materials into Bridging, Edward Mark Lenoe, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p64-71.

Automated Design of 3-D Highway Sign Bridge Structures, C. C. Fu, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p930-937.

Bridge Condition Rating Using Fuzzy Sets and an Eigenvector of Priority Settings, Hani G. Melhem and Senaka Aturaliya, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1908-1915.
Characteristics of the US Highway Bridge Population,

Kenneth F. Dunker and Basile G. Rabbat, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p1006-1013.

Computer Analysis of Continuous P/C Highway Bridge Girders with Variable Depth, Hani Melhem and Weiqun Zhang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p696-703.

Condition Assessment of Highway Bridges, Taner Aksel, Kuo-Liang Lee and Emin A. Aktan, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1124-1130.

Construction of the Baytown Bridge, Houston, Man-Chung Tang, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p666-671.

Contraction Scour at a Bridge over the Iowa River, Edward E. Fischer, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p31-35.

Crack Width Control with Engineered Cementitious Composites in R/C Structures, Mohamed Maalej and Victor C. Li, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p359-366.

Development of Bridge Live Load Models, John M. Kulicki, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p532-537.

Dynamic Behavior of Slant-Legged Rigid Frame Highway Bridge, Ton-Lo Wang, Dongzhou Huang and Mohsen Shahawy, ST Mar. 94, p885-902.

Evaluation of Projects for Rehabilitation of Highway Bridges, J. O. Sobanjo, George Stukhart and Ray W James, ST Jan. 94, p81-99.

V. Brizick, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p302-307.

Impact Factors for Simple-Span Highway Girder Bridges, Dongil Chang and Heehyun Lee, ST Mar. 94, p704-715.

LRFD Provisions for Wood Bridges, Michael A. Ritter and Andrzej S. Nowak, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p549-554.

Modal Filter Based Structural Control of a Highway Bridge, S. J. Shelley, E. A. Aktan and K. L. Lee, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p347-356.

Optimal Design of Structural Concrete Bridge Systems, M. Z. Cohn and Z. Lounis, ST Sept. 94, p2653-2674.

Seismic Evaluation of the Macy Street Bridge, Los Angeles, California, Using 3-D Nonlinear Pushover Methodologies, John C. Castro and Jason S. Maxwell, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1099-1105.

Seismic Research Program for Highway Construction, Ian G. Buckle and Ian M. Friedland, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994),

p373-379.

Seismic Response Studies on a Two Span Slab-On-Girder Bridge, J. B. Mander, S. S. Chen, D-K. Kim and D. S. MacEwan, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p361-366.

Use of FESWMS-2DH for the Attaway Road Bridge Repair Project, M. A. Ports, D. D. Dee, Jr. and J. Warren, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p579-583.

Bridges, long span

Finite Element-Based Flutter Analysis of Cable-Suspended Bridges, Ahmad Namini, Pedro Albrecht and Harold Bosch, ST June 92, p1509-1526.

Bridges, piers

Bridge Pier Scour with Debris Accumulation, Bruce W. Melville and D. M. Dongol, HY Sept. 92, p1306-1310.

Bridge-Pier Location and Ice Conveyance in Curved Channels, Gilberto E. Urroz, Joseph Schaefer and Robert Ettema, CR June 94, p66-72.

Brief Summary of National Bridge Scour Data Base, Mark N. Landers, J. Sterling Jones and Roy E. Trent, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p41-45.

Effect of Bridge Pier Shape and Contraction Ratios on Backwater Profile, Sabah Al-Nassri, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p563-568.

Horizontal and Vertical Movements of Bridge Piers Sub-jected to Ship Impact, Naresh C. Samtani, Jaw-Nan Wang, Frank Pepe, Jr. and Michael J. Abrahams, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p245-256.

Monte Carlo Simulation for Correlated Variables with Marginal Distributions, Che-Hao Chang, Yeou-Koung Tung and Jinn-Chuang Yang, HY Mar. 94, p313-331.

Practical Method for Scour Prediction at Bridge Piers, J. R. Richardson and E. V. Richardson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1-5.

Reliability-Based Pier Scour Engineering, Peggy A. Johnson, HY Oct. 92, p1344-1358.

Bridges, railroad

Field Tests of Railway Bridges, D. A. Foutch, D. H. Tobias and J. Choros, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1118-1123.

Instrumentation and Testing of a Three Hinge Arch for Service Loads Increase, John Choros, Eduardo Ramirez and Vinaya Sharma, (Structures Congress XII, N. C.

Baker, ed. and Barry J. Loodno, ed., 1994), p1106-1111.
Seismic Performance of Railway Bridges, V. Sharma, J.
Choros, E. M. Maragakis and W. G. Byers, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p367-372.

Bridges, spans
Advances in the Modelling of Leng Span Bridges for Wind
Effects, J. Peter C. King and Alan G. Davenport, (Struc-lures Congress XII, N. C. Baker, ed. and Barry J. Lood-no, ed., 1994), p875-880.

Technologies for Short-Span Bridge Solutions,

Emerging Technologies for Short-Span Bridge Solutions, M. Zoghi, D. A. Tomley and M. P. Henderson, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1163-1170.

Multi-mode Aerodynamic Analysis of Long-Span Bridges, Nicholas P. Jones, Anurag, Jain and Robert H. Scanlan, (Structures Congress XII, N. C. Baker, ed. and Barry J.

Loodno, ed., 1994), p894-899.
The Normandie Bridge, Michel Virlogeux, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p660-665.

Performance of New York's Long-span Bridges, Satinder P. S. Puri, Richard J. Kratky and Maria Grazia Bruschi, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1022-1031.

Pre-Engineered Short Span Steel Bridges, Camille G. Ru-beiz and Charles D. Gorman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994),

p1082-1087.

Seismic Response Studies on a Two Span Slab-On-Girder Bridge, J. B. Mander, S. S. Chen, D-K. Kim and D. S. MacEwan, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p361-366. Talmadge Bridge Replacement, Michael Abrahams and

Man-Chung Tang, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p182-187.

The Tatara Bridge - World's Longest Cable-Stayed Span, Manabu Ito and Takeo Endo, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p677-

Traffic Loads on Large Bridges Modeled as White-Noise Fields, Ove Ditlevsen, EM Apr. 94, p681-694.

Bridges, steel

Accurate and Rapid Determination of Fatigue Damage in Steel Bridges, C. Hahin, J. M. South, J. Mohammadi and R. K. Polepeddi, ST Jan. 93, p150-168.

Acoustic Emission Monitoring of Steel Bridges, A. K. Maji and T. Kratochvil, (Structures Congress XII, N. C.

Baker, ed. and Barry J. Loodno, ed., 1994), p1322-1327. Bridge Diaphragm Elements with Partial Warping Restraint, C. C. Fu and Yao T. Hsu, ST Nov. 94, p3388-

Bridge Fabrication Error Solution: Developing a Knowledge-Based Expert System for a State Department of Transportation, W. M. Kim Roddis and Michael R. Hess, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1687-1694.

Bridge Rating Using Influence Surface for Curved Bridge Structures, C. C. Fu, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p688-695.

Comparison of Bridge Deterioration Rates, David Vesho sky and Carl R. Beidleman, (Structures Congress XII, N. Baker, ed. and Barry J. Loodno, ed., 1994), p296-

Cumulative Impact of Heavy Permit-Trucks on Steel Bridges, Michel Bruneau and Murat Dicleli, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p97-102.

Current and Future Research in Steel Bridge Structures, Karl H. Frank, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1077-1081.

Expert System with Learning Ability for Retrofitting Steel Bridges, Ichizou Mikami, Shigenori Tanaka and Akira

Kurachi, CP Jan. 94, p88-102. Fatigue-Reliability Evaluation of Steel Bridges, Zhengwei Zhao, Achintya Haldar and Florence L. Breen, Jr., ST May 94, p1608-1623. Fatigue-Reliability Updating Through Inspections of Steel Bridges, Zhengwei Zhao, Achinyta Haldar and Florence L. Breen, Jr., ST May 94, p1624-1642.

Field Tests of Railway Bridges, D. A. Foutch, D. H. Tobias and J. Choros, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1118-1123.

Horizontally Curved Steel Bridge Research-Update 2, S. R. Duwadi, J. M. Yadlosky and C. H. Yoo, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1071-1076.

An Inductive Knowledge-Based System for Mitigation of Bridge Fabrication Errors, Srinath Nagaraja and Hani Melhem, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1083-1090.

Landmarking a Steel Railroad Bridge in Chile, CE July 94,

Modular Evolution, Steven M. Shaker and Jeffrey H. Greenwald, CE May 94, p64-67.

NDE for Steel Bridges, Steven B. Chase, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1203-1208.

NDE for Steel Bridges: FHWA Research, Past, Present and Future, Steven B. Chase, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1060-1064.

Pre-Engineered Short Span Steel Bridges, Camille G. Ru-beiz and Charles D. Gorman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1082-1087

prob2-1087.
Safety Analysis of Suspension-Bridge Cables: Williams-burg Bridge, John Matteo, George Deodatis and David P. Billington, ST Nov. 94, p3197-3211.
Seismic Evaluation of the Tied-arch Bridge Across the Mississippi River on I-40, W. David Liu, Roy A. Imbsen, Richard J. LeBeau, Farid S. Nobari and Lelio H. Mejia, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p355-360. Steel Bridges: That Other Big Student Mania, NE Aug. 94,

p10.

Steel May Stave Off Earthquake Damage (ltr), CE May 94,

p36,38. Wind Studies of the Owensboro Bridge, Kentucky, P. A. Irwin, V. Chandra, J. Xie and G. K. Stone, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p887-893.

Bridges, structures

Automated Design of 3-D Highway Sign Bridge Struc-tures, C. C. Fu, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p930-937.

Bridge Rating Using Influence Surface for Curved Bridge Structures, C. C. Fu, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p688-695.

Seismic Analysis of Bridges: Simplified or Refined Approach, Y. Chen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p79-84.

Bridges, suspension

Advances in the Modelling of Long Span Bridges for Wind Effects, J. Peter C. King and Alan G. Davenport, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p875-880.

Akashi-Kaikyo Bridge Underconstruction, Fumio Nishino, Takeo Endo and Shin Kitagawa, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p779-780.

Cables Over the Mississippi, Ernst H. Petzold, CE Feb. 94, p62-65.

Construction of Akashi-Kaikyo Bridge West Anchorage, Nobuaki Furuya, Reizou Yamaoka and Boyd C. Paulson, Jr., CO June 94, p337-356.

Innovations in Major Suspension Bridge Design, Klaus H. Ostenfeld, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p772-778.

Seismic Performance and Retrofit of the Golden Gate Bridge, Charles Seim, Tim Ingham, Ph.D. and Santiago Rodriguez, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p763-771.

Synthetic Wind for Investigations in Time-Domain, Imre Kovacs, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p900-905.

Vibration of Suspension Bridges Under Vehicular Move-ment, P. K. Chatterjee, T. K. Datta and C. S. Surana, ST Mar. 94, p681-703.

Bridge, I. E. Harik, D. L. Allen, R. L. Street, M. Guo, R. C. Graves, J. Harison and M. J. Gawry, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1112-1117. 3-D Dynamic Analysis of the Brent-Spence Through-Truss

Analysis and Computation of Old Truss Bridges, Beile Yin, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p32-47.

Design and Field Performance of a Metal-Plate-Connected Wood Truss Bridge, Michael H. Triche, Michael A. Ritter, Stuart L. Lewis and Ronald W. Wolfe, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1310-1315.

Design of Half-Through or "Pony" Truss Bridges Using Square or Rectangular Hollow Structural Sections, Steven J. Herth, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U.

Penalba, ed., 1994), p210-220.

Inspection and Repair of a Timber Truss Bridge - An Application of Nondestructive Testing, Norbert J. Volny, (Infrastructure: New Materials and Methods of Repair,

Kim D. Basham, ed., 1994), p654-661.

Nonlinear Analysis and Experimental Validation of a Stiffening Truss Chord of the Golden Gate Bridge, R. A. Dameron, R. S. Dunham and J. C. Castro, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1106-1114.

Wind Effects and Countermeasures During Erection of a Cable-stayed Bridge, S. G. Arzoumanidis, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p881-886.

Bridges, wooden

Aesthetic Issues in Timber Bridges, Frederick M. Law, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1268-1273.

Bulb-T and Glulam-FRP Beams for Timber Bridges, J. F. Davalos, H. V. S. GangaRao, S. S. Sonti, R. C. Moody and R. Hernandez, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1316-1321.

Design and Field Performance of a Metal-Plate-Connected Wood Truss Bridge, Michael H. Triche, Michael A. Ritter, Stuart L. Lewis and Ronald W. Wolfe, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1310-1315.

Development of Hardwood Glulam Timber Bridge Standards, H. B. Manbeck, J. J. Janowiak, P. R. Blankenhorn and P. Labosky, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1304-1309.

Guardrail in Posttensioned Timber-Bridge Specimen, Richard M. Gutkowski, Patrick J. Pellicane and Jean-Francois Kalin, ST Dec. 94, p3435-3455.

Innovations in Glulam Timber Bridge Design, Michael A. Ritter, Thomas G. Williamson and Russell C. Moody, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1298-1303.

Inspection and Repair of a Timber Truss Bridge - An Application of Nondestructive Testing, Norbert J. Volny, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p654-661.

LRFD Provisions for Wood Bridges, Michael A. Ritter and Andrzej S. Nowak, (Structures Congress XII, N. C Baker, ed. and Barry J. Loodno, ed., 1994), p549-554.

Response of Stressed Timber T - and Box-Beam Bridges, Hota GangaRao, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p701-706.

Seismic Study of Historic Bridges in Eastern United States, Constantine C. Spyrakos, Emory L. Kemp and Ramesh Venkatareddy, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p380-386.

Corrosion of HLW Carbon Steel Containers in the Vapor Phase of Salt Brines, E. Smailos, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p963-968.

Simulated Waste Package Test in Salt, Hemendra N. Kalia, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1930-1937.

Brittle failure

Biaxial Testing of Brittle Repair Material for Rigid Pavements, George Z. Voyiadjis and Taher M. Abu-Lebdeh, (Structures Congress XII, N. C. Baker, ed. and Barry J.

Loodno, ed., 1994), p964-971.
Fracture Size Effect: Review of Evidence for Concrete Structures, Zdeněk P. Bažant, Joško Ožbolt and Rolf Eli-

gehausen, ST Aug. 94, p2377-2398.

Constitutive Theory of Interface Behavior in Quasi-Brittle Materials, H. Y. Yang and Ming L. Wang, EM Dec. 94, p2588-2603.

Broad-crested weirs

Broad-Crested Weir, Willi H. Hager and Markus Schwalt, IR Jan./Feb. 94, p13-26.

Side-Weir Analysis Using Elementary Discharge Coefficient, Prabhata K. Swamee, Santosh K. Pathak and Masoud S. Ali, IR July/Aug. 94, p742-755.

ASCE Elevates 13 of Its Own to Honorary Membership, NE May 94, p3.

Atlanta Ceremony Celebrates 13 New Honorary Members of ASCE, NE Dec. 94, p2-3.

Brown, George E. Jr.

Congressman Brown Named ASCE Honorary Fellow, NE Apr. 94, p15.

Bubbles

Air Entrainment and Bubble Behavior in Plunge Pools, Boualem Hadjerioua, Emmett M. Laursen, Margaret S. Petersen and Tony A. Rizk, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p989-993.

Application of a Needle Probe in Measuring Local Paramepplication of a Needle Proof in Measuring Countries in Air-Water Flow, A. R. Zarrati and J. D. Hardwick, (Fundamentals and Advancements in Hydraulic Measuring Countries in Measuring Countries urements and Experimentation, Clifford A. Pugh, ed.,

1994), p296-300.

Development of a Visual Method to Track the Movement of Hydrogen Bubbles in a Laboratory Flume, Athanasios N. Papanicolaou and Panayiotis Diplas, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p205-212. Oxygen Transfer in Bubbly Turbulent Shear Flow, Kyung

Soo Jun and Subhash C. Jain, HY Jan. 93, p21-36. Self-Aerated Flows on Chutes and Spillways, H. Chanson,

HY Feb. 93, p220-243.

Shear Modulus of Kaolin Containing Methane Bubbles, S. M. Duffy, S. J. Wheeler and J. D. Bennell, GT May 94, p781-796

The Use of Piezoelectric Film in Cavitation Research, Saurav Paul, Christopher R. Ellis and Roger E. A. Arndt, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p454-471.

Void Fraction Measurement Techniques for Gas-Liquid Bubbly Flows in Closed Conduits; A Literature Review, Mahmood Naghash, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p278-288.

Analysis of Composite Panels Using Newton's Method, Norman F. Knight, Ir., (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p147-155.

Analysis of Unstiffened and Stiffened Tubular Members Under External Pressure and Structural Loads, Spyros A. Karamanos and John L. Tassoulas, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1520-1525.

An Application of Inverse Problem Techniques to Spatial Structures, Pei Shan Chen, Mamoru Kawaguchi and Masaru Abe, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U.

Penalba, ed., 1994), p113-122.

AWS versus AlJ Tubular K-Connection Design Rules, Yoshiaki Kurobane and Kenshi Ochi, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p190-199.

Basics of Flexible Pipe Structural Design, R. C. Prevost and K. K. Kienow, TE July/Aug. 94, p652-671.

Beam-Buckling Analysis via Automated Rayleigh-Ritz Method, C. M. Wang, L. Wang and K. K. Ang, ST Jan. 94, p200-211.

Behavior of Gypsum-Sheathed Cold-Formed Steel Wall Studs, Thomas H. Miller and Teoman Pekoz, ST May

94, p1644-1650.

Buckle Propagation: Steady-State Finite-Element Analysis, André C. Nogueira and John L. Tassoulas, EM Sept. 94, p1931-1944.

Buckling and Vibration Analysis of Laminated Panels Using VICONOPT, David Kennedy, Fred W. Williams and Melvin S. Anderson, AS July 94, p245-262

Buckling Behavior of Square-and-Diagonal Double-Layer Grid, Toshitsugu Saka and Yoshiya Taniguchi, ST Apr. 94, p1088-1102

Buckling Mode Change of Antisymmetric Angle-Ply Laminates, Wen-Chi Chen, EM Mar. 94, p661-669.

Buckling of Plates with Stiffening Elastically-Restrained Edges, Raymond H. Plaut and Ardéshir Guran, EM Feb. 94, p408-411.

Buckling of Single Layer Latticed Dome under Uniform Gravity Load, Masumi Fujimoto, Katsuhiko Imai and Toshitsugu Saka, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p509-518.

Buckling Solutions of Rectangular Mindlin Plates under Uniform Shear, C. M. Wang, Y. Xiang and S. Ki-tipornchai, EM Nov. 94, p2462-2470.

Buckling Strength of Wood Power Poles Using Finite Elements, A. B. Peabody and J. W. Wekezer, ST June 94, p1893-1908.

Cause of Deformed Shapes in Cooling Towers, Jean-François Jullien, Waeil Aflak and Yvan L'Huby, ST

May 94, p1471-1488.

May 34, p.19/1-1909. Collapse Behavior of Double-Layer Space Truss Grids with Member Buckling, Toshitsugu Saka and Yoshiya Taniguchi, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. John F. Abet, ett., John W. Leonard, ett. and Collaboration Penalba, ed., 1994), p529-538.

Column Design in Steel Frames under Gravity Loads, Oscar de Buen, ST Oct. 92, p2928-2935.

Comparison of Donnell and Higher Order Nonlinear Models for Dynamically Loaded Composite Plates and Shells, Arthur E. Forral and Anthony N. Palazotto, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994),

Comparison of Simple and Chebychev Polynomials in Rayleigh-Ritz Analysis, Sarvesh Singhvi and Rakesh K. Kapania, EM Oct. 94, p2126-2135.

Compression-Member Models for Space Trusses: Review,

Erling Murtha-Smith, ST Aug. 94, p2399-2407. Compressive Strength of Large Scale HSLA-80 Steel Cel-lular Sections of a Double Hull Ship Structure, Alan Ah-Kum Pang, James M. Ricles, Le-Wu Lu and Perry Green, (Structures Congress XII, N. C. Baker, ed. and

Barry J. Loodno, ed., 1994), p1538-1543.

Cross Bracings in Tapered Systems: Semirigid Ends, Robert Levy, Fred Segal and Avigdor Rutenberg, EM Aug. 94, p1803-1818.

Design of Cantilever Steel Beams: Refined Approach, Hesham S. Essa and D. J. Laurie Kennedy, ST Sept. 94, p2623-2636.

Design of Half-Through or "Pony" Truss Bridges Using Square or Rectangular Hollow Structural Sections, Steven J. Herth, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p210-220.

Design of Imperfect Cross-Bracings, Fred Segal, Robert Levy and Avigdor Rutenberg, EM May 94, p1057-1075.

Design of Lateral Steel in Columns, Shamim A. Sheikh and Murat Saatcioglu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p432-437.

Design Strengths of Cold-Formed Channels in Bending and Torsion, K. T. Kavanagh and D. S. Ellifritt, ST May

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Discrete Field Stability Analysis of X-Braced Lattices, Raja R. A. Issa and R. Richard Avent, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p450-459. Dynamic Effects of Progressive Member Failure on the Re-

Sponse of Truss Structures, Ramesh B. Malla, Baihai Wang and Butchi B. Nalluri, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B.

Malla, 1993), p60-76.

Effect of Boundary Conditions on Buckling of Friction Piles, Mohammed A. Gabr, Jibai Wang and Sam A.

Kiger, EM June 94, p1392-1400.

Effect of Joint Rigidity on Buckling Strength of Single Layer Lattice Domes, Shiro Kato, Itaru Mutoh and Masaaki Shomura, (Spatial, Lattice and Tension Struc-tures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p469-478.

The Effect of Member Snap on Progressive Collapse of Space Structures, Nicholas F. Morris, (Dynamic Response and Progressive Failure of Special Structures,

Ramesh B. Malla, 1993), p17-31. Elastic Buckling Strength of Gusset Plate Connections, J. J. Roger Cheng, Michael C. H. Yam and S. Z. Hu, ST Feb. 94, p538-559.

Elasto-Plastic Buckling Design for Shallow Cylindrical Shells under External Pressure, Seishi Yamada and James G. A. Croll, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p936-945.

Equations for Tapered Thin-Walled Beams of Generic
Open Section, Sundaramoorthy Rajasekaran, EM Aug.

94, p1607-1629.

Experimental Study on a Buckling Behavior of a Wooden Single-Layer Space Frame of Reticular Shell on a Hexagonal Plan: Influence due to the Bolted Joint Looseness with Axial and Bending Resistance, Kouichi Matsuno and Shigeru Aoki, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p152-161.

Experimental Study on the Buckling Behavior of a Triodetic Aluminum Space Frame: No. 2 Ultimate Bearing Strength of a Single Layer Space Frame, Kenichi Sugizake and Shigeru Kohmura, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p479-488.

Finite Element Method for Buckling Analysis of Plate Structures, Chee-Kiong Chin, Faris G. A. Al-Bermani and Sritawat Kitipornchai, ST Apr. 93, p1048-1068.

Flange Local Buckling and Behavior of I-Sections, Iqbal S. Sohal and Liping Cai, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p213-222.

Flexural Strength of Profiled Beams, Deric J. Oehlers, Howard D. Wright and Matthew J. Burnet, ST Feb. 94,

p378-393.

A Generalized Approach to the Local Stability of Stiffened Plates: Part I-Mathematical Formulation, Osama Bedair and Archibald Sherbourne, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1526-1531.

A Generalized Approach to the Local Stability of Stiffened Plates: Part II-Approximate Solution, Archibald Sherbourne and Osama Bedair, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1532-1537.

Impact of Non-Gaussian pdf on Reliability Estimates for Deep Water Platforms, John M. Niedzwecki, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1463-1465.

Imperfections and Thin-Walled Bars Behaviour, J. B. Obrebski and M. E. El-Awadi, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p310-319.

Inelastic Bending and Torsion of Steel I-Beams, Yong Lin Pi and N. S. Trahair, ST Dec. 94, p3397-3417.

Instability of Tapered Thin-Walled Beams of Generic Section, Sundaramoorthy Rajasekaran, EM Aug. 94, p1630-1640.

Large Deformation Analysis of Lattice Truss Structures Including Hysteretic Material Behavior, Nayla Khattar, George E. Blandford and Shien T. Wang, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p499-508

Lateral Bracing Criteria of the Composite Braces, Kazuo Inoue, Yasuo Higashibata and Kazuhiro Inoue, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p152-157.

Lateral Buckling: A Comparison of AISC-LRFD and Eu-rocode 3, Reynaud L. Serrette, (Structures Congress XII. N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p333-336

Load-Eccentricity Effects on Cold-Formed-Steel Lipped-Channel Columns, Thomas H. Miller and Teoman

Pekoz, ST Mar. 94, p805-823.

Local Buckling by Complex Finite Strip Method Using Bubble Functions, Mojtaba Azhari and Mark Andrew Bradford, EM Jan. 94, p43-57.
Local Buckling of Pultruded FRP Beams: Theory and Experiment, L. C. Bank, M. Nadipelli, T. R. Gentry and J. S. Yin, (Structures Congress XII). N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p417-422.
Local Web Crimbing of Unstiffened Multi-Cell Box Sec.

Local Web Crippling of Unstiffened Multi-Cell Box Sections, Mark R. Kaczinski, Christopher R. Schneider, Robert J. Dexter and Le-Wu Lu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p343-348.

Lower Bounds for Overall Buckling of Spherical Space Domes, M. Kashani and J. G. A. Croll, EM May 94,

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Metal Truss Plates: Less than Full-Depth Penetration and Shear Buckling, Keith F. Faherty, Gerri L. Peot nee Kocher and Matthew J. Mazza, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p695-700.

Nonlinear Analysis of Space Trusses, Erling Murtha-Smith, ST Sept. 94, p2717-2736.

Nonlinear Buckling Response of Single Layer Latticed Barrel Vaults, Seishi Yamada and Takashi Taguchi, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p519-528.

Nonlinear Finite Deformation Analysis of Beams and Columns, Ronald Y. S. Pak and Eric J. Stauffer, EM Oct. 94,

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Out-of-Plane Buckling of Restrained Thin Rings of General Open Section, J. G. Teng and R. M. Lucas, EM May 94, p929-948.

Parameters Affecting Distortional Buckling of Tapered Steel Members, Hamid Reza Ronagh and Mark Andrew Bradford, ST Nov. 94, p3137-3155.

Postbuckling Response of Doubly-Curved Shallow Panels Under Complex Loading Conditions, L. Librescu and M. Y. Chang, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p116-126.

Reliability Analysis of Stiffened Panels, E. Nikolaidis, O. Hughes, B. M. Ayyub and G. J. White, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p1466-1471

Response of Space Trusses During Progressive Failure, George E. Blandford and Shien T. Wang, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p1-16.

Response of Truss Structures Subjected to Dynamic Loads
During Member Failure, Ramesh B. Malla and Butchi, B. Nalluri, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p249-258.

Simplified Strength Prediction for Cold-Formed C- and Z-Shapes, R. A. LaBoube, ST June 93, p1733-1739

Simulation Procedure for Buckling Behaviors of a Reticu-lar Dome, Shiro Kato, Hideyuki Takashima, Isao Ku-bodera and Takashi Ueki, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p460-468.

Slenderness K factor for Leaning Columns, J. Dario Aris-tizabal-Ochoa, ST Oct. 94, p2977-2991.

Snap Buckling of a Delaminated Layer in a Composite Cylinder, Wan-Lee Yin, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p156-165.

Plate The State Analysis of Buckle Propagation, André Nogueira and John L. Tassoulas, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1514-1519.

Steel Compression Member Design in the 1994 Canadian Standard, D. J. Laurie Kennedy, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994),

Structural Tests on the "Suspen-Dome" System, Mamoru Kawaguchi, Masaru Abe, Tatsuo Hatabo, Ikuo Tatemichi, Satoshi Fujiwara, Hiroaki Matsufuji, Hiroyuki Yoshida and Yoshimichi Anma, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard,

ed. and Celina U. Penalba, ed., 1994), p383-392. A Study on Buckling Characteristics of Single-Layer Latticed Domes with the Initial Geometrical Imperfection, Hwan-Mok Jung, Young-Hwan Kwon and Moon-Myung Kang, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U.

Penalba, ed., 1994), p489-498. Study on Mechanical Characteristics of Light-weight Complex Structure Composed of a Membrane and a Beam String Structure, Masao Saitoh, Akira Okada, Katsuo Maejima and Tetsuo Gohda, (Spatial, Lattice and Ten-sion Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p632-641.
Thin-Walled Curved Beams, I: Formulation of Nonlinear

Equations, Young J. Kang and Chai H. Yoo, EM Oct.

94, p2072-2101.
Thin-Walled Curved Beams. II: Analytical Solutions for Buckling of Arches, Young J. Kang and Chai H. Yoo, EM Oct. 94, p2102-2125.

Three-Dimensional Solutions for Initially Stressed Structural Sandwiches, Ahmed K. Noor, Jeanne M. Peters and W. Scott Burton, EM Feb. 94, p284-303.

Ultimate Loading Capacity of Braced Domes, X. Chen, N. Hilliade Loading Capacity of Braced Bonnes, A. Chai, S. Wang and S. Z. Shen, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p539-546.

Unstiffened Strip Approach for Perforated Wall Studs, Thomas H. Miller and Teoman Pekoz, ST Feb. 94,

p410-421.

What Controls the Ultimate Load of a Glulam Dome? S. M. Holzer, S. A. Kavi, S. Tongtoe and J. D. Dolan, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p86-96

Wind-Induced Nonlinear Lateral-Torsional Buckling of Cable-Stayed Bridges, Virote Boonyapinyo, Hitoshi Ya-mada and Toshio Miyata, ST Feb. 94, p486-506.

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Risk-Based Budgeting for Maintenance Dredging, Michael R. Walsh and David A. Moser, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p234-242.

Clinton Administration's Investment Budget for FY1995,

CE Apr. 94, p128.

- Global Network Optimization for Pavement Management, Kelvin C. P. Wang and John Zaniewski, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p474-482
- In Clinton Budget, ISTEA Funding Gains Ground, Spending for Science and Technology also Gets Boost, NE Mar. 94, p16.

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Apr. 94, p1,3.

We'd do it Again, Say Partnering Vets, ME July/Aug. 94,

"Dynamic Compaction Used as a Winter Construction Exconstant Constitution Expedient", Lawrence F. Johnsen and Christopher Tonzi, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p68-79.

Bridge Buffeting by Skew Winds in Erection Stages, Robert H. Scanlan, EM Feb. 93, p251-269.

Synthetic Wind for Investigations in Time-Domain, Imre

Kovacs, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p900-905.

Wind Loads on Roofs of Low Rise Structures: Buffeting or Interaction, Henry W. Tieleman, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994),

Building codes

Advanced Uses of Pen Computers in Building Inspection, Raja R. A. Issa, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1454-1457.

Are Building Codes and/or Enforcement Adequate for Hurricane Protection? Lindsey E. Carter and Gary G. Ni-chols, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p626-631.

Beliefs about Hurricane Andrew, Construction, and Evacu-ation, Earl J. Baker, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p31-36.

Building Code Enforcement Issues, Hindsight and Fore-sight, John C. Pistorino, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p125-132.

Building Code of Australia Expert Assistant - Putting Research into Practice, Ron Sharpe, Stephen Oakes, Philip Haselden and Ian Davidson, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1679-1686.

The Canadian Approach in the Design of Wood Structures: Conversion to Limit States Design, Dominique P. Janssens, (Structures Congress XII, N. C. Baker, ed. and

Barry J. Loodno, ed., 1994), p514-519.

Catastrophic Hurricanes May Become Frequent Events in Caribbean and Along the United States East and Gulf Coasts, Robert C. Sheets, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p37-51.

Column and Beam-Column Design - A World View, N. E. Shanmugam and W. F. Chen, (Structures Congress XII, C. Baker, ed. and Barry J. Loodno, ed., 1994),

Computer Analysis of Lateral Loading in Wood-Framed Structures, R. Williams, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1513-1515.

Consequential Fire Loads on Structures, Donald O. Dusenberry, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p996-1001.

The Context-Oriented Model: An improved Modeling Approach for Representing and Processing Design Standards, Han Kiliccote, James H. Garrett, Jr., Thomas J. Chmielenski and Kent A. Reed, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p145-152.

Critical Issues in Post Disaster Code Enforcement, Wilson C. Barnes and Jose D. Mitrani, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p284-293.

Damage to Engineered Structures at Homestead AFB, Maurice R. Harlan, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p213-222.

Design and Construction Deficiencies and Building Code Adherence, Mohammed S. Khan and Wimal Suaris, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p133-146.

Dual-Level Approach for Seismic Design of Asymmetric-Plan Buildings, Rakesh K. Goel and Anil K. Chopra, ST Jan. 94, p161-179.

Economic Risk Analysis of Building Codes, James D. Englehardt, Chengjun Peng and Ahmad Namini, (Hurri-canes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p674-683.

Evaluation of Cast Iron Columns for Safety and Reliability, Joel S. Weinstein, William Lamarina and Mark Tamaro, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1544-1549. Evaluation of Code Accidental-Torsion Provisions from Building Records, Juan Carlos De la Llera and Anil K.

Chopra, ST Feb. 94, p597-616.
Failures and Failure Mechanisms for Exterior Walls, Gene S. Sanders, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p509-518.

High-Strength Concrete Columns: State of the Knowledge, A. Azizinamini, P. Paultre and M. Saatcioglu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p444-449.

Hurricane Andrew's Effect on Manufactured Housing, Hurricane Andrew's Effect on Manufactured Housing, Mike Mafi, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994, p.158-165.
Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994, 0-7844-0046-6, 808pp.

The Importance of Hurricane Risk Assessment in Housing and Improved Design and Building Practice Therein, Desmond Imbert, Patrick Drakes and David Prevatt, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p684-695.

Improving the Performance of Architectrual Glazing in Hurricanes, Joseph E. Minor and Richard A. Behr, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p476-485.

Intentions and Credences - An Australian Approach to Computerised Building Regulation, Jane Blackmore, Frank Leong and Ron Sharpe, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p131-136.

Lessons Learned from the Hurricanes of 1992, Ronald A. Cook, Mehrdad Soltani and Timothy A. Reinhold, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p799-802.

The Manufactured Home Dilemma, James R. McDonald, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p195-202.

Overview of Hurricane Iniki, Arthur N. L. Chiu, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p92-101.

Performance of Plywood and OSB Sheathing During Hur-ricanes Andrew and Iniki, Edward L. Keith, (Hurricanes of 1992: Lessons Learned and Implications for the Fu-ture, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p313-329.

Period-Dependent Effects in Seismic Torsional Response of Code Systems, Adrian M. Chandler, Joseph C. Correnza and Graham L. Hutchinson, ST Dec. 94,

Redefining the Roles Insurers and Engineers Play in Hurricane Preparedness and Mitigation, Eugene L. Lecomte, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p1-9.

Reliability Assessment of Prestressed Concrete Beams, Ali S. Al-Harthy and Dan M. Frangopol, ST Jan. 94, p180-

Reliability of Short and Slender Reinforced-Concrete Col-umns, Sonia E. Ruiz and J. Cipriano Aguilar, ST June 94, p1850-1865.

Roof-Snow Load for Seismic-Design Calculations, Michael J. O'Rourke and Robert S. Speck, Jr., ST Sept. 92, p2338-2350.

Seismic Issues in Structural Engineering Codes and Practice, Vilas Mujumdar, (Structures Congress XII, N. C Baker, ed. and Barry J. Loodno, ed., 1994), p1214-1219.

Some Aspects of Compression Member Design in Australia, Murray J. Clarke and Russell Q. Bridge, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1587-1592.

Stability of Columns under Uniform Axial Load with Semirigid Connections, J. Dario Aristizabal-Ochoa, ST Nov. 94, p3212-3222.

Standards Processing 2000, Dana J. Vanier, J. Russell Thomas and Jamie L. Worling, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p137-144.

State-of-the-Art Report on Seismic Performance of Unreinforced Masonry Buildings, Michel Bruneau, ST Jan. 94,

Successes and Failures of Metal Building Systems During Hurricane Andrew, Nanette Dean, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), n465-471

A Survey of Building Performance in Hurricane Iniki and Typhoon Omar, James W. Sheffield, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p446-455.

Survivability of Manufactured Housing in Hurricanes, John M. Dye, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p176-184.

Synopsis of a Manual on Structural Fire Protection, T. T. Lie and E. L. Schaffer, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1002-1005.

Tentative Provisions for the Development of Seismic Reg-ulations for Buildings, Roland L. Sharpe, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p116-121.

US Hurricanes of 1992 an Australian Perspective, Greg Reardon and Doug Meecham, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p642-651.

Void Mortar Joints: Bane of Brick Masonry, Clayford T. Grimm, CO Mar. 94, p152-161.

Wind Action on Highrise Structures: Codes - Wind Tunnel Reality, Nicholas Isyumov, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p430-445. Wind Forces on Industrial Facilities, Joseph A. Bohinsky

and Hikmat E. Zerbe, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1036-1041. Wind Loads on Low Rise Structures: A Survey, B. L. Sill and T. A. Reinhold, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1030-1035.

Wind Resistance of Conventional Light-Frame Buildings, Ronald W. Wolfe, Ramon M. Riba and Mike Triche, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad So-

tani, ed., 1994), p652-662. Wind Tunnel Testing of High-Rise Residential Buildings in Hurricane Areas, Peter A. Irwin, Mark A. Hunter, Mark Mosbat and Sanjeev M. Shah, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p663-673.

The Winds of Change? Paul Tarricone, CE Jan. 94, p42-45.

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Applications of Artificial Intelligence Techniques to Component-Based Modular Building Design, C. Bridgewater and B. L. Atkin, CP Oct. 94, p469-488.

Bridging the Gap Between Architecture and Engineering, Thomas L. Harrison, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1256-1261. 61

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Case-Based Design in the SEED System, Ulrich Flemming, Robert Coyne and James Snyder, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p446-453.

Computer Analysis of Lateral Loading in Wood-Framed Structures, R. Williams, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1513-1515

ing, snail knożerinen, ed., 1994), p1515-1515.
Computer-Integrated Construction and CM Firms: A Profitable Combination, Ed Ott, Matt Syal and Gary Gehrig, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1751-1755.
Design and Analysis of the 712 Fifth Avenue Structure,

Louis A. Occhicone and Stanley Wojnowski, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1556-1561.

Design and Construction Deficiencies and Building Code Adherence, Mohammed S. Khan and Wimal Suaris, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p133-146.

Extended Topology in Building Design Systems, Godfried Augenbroe and Wouter Rombouts, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1196-

First Bank Place: A Composite Cruciform Spine, P. V. Banavalkar, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p134-139

A Frame-Based Drawing Management System Based on Building Object Model, Gakuhito Hirasawa and Yusuke Yamazaki, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p555-562.

Functional Analysis of the Envelope Design Process for Integrated Building Design, Hugues Rivard, Claude Bédard, Kinh H. Ha and Paul Fazio, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p71-78

Guidelines to Minimize Floor Vibrations from Building Occupants, Sarah E. Mouring and Bruce R. Ellingwood,

ST Feb. 94, p507-526.

Impediments to the Implementation of Seismic Isolation. Ronald L. Mayes, (Structures Congress XII, N. C. Baker,

Rohad L. Mayes, Giffuctures Congress AT, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p128-133. Improved Computer Simulation of 3D Wind Flow Around a Building, Y. S. Zhou and T. Stathopoulos, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p88-91

proved Wide-Column-Frame Analogy for Shear/Core Wall Analysis, A. K. H. Kwan, ST Feb. 93, p420-437.

Improving the Performance of Architectrual Glazing in Hurricanes, Joseph E. Minor and Richard A. Behr, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p476-485.

Integrated Building Design Systems in Context of Product Data Technology, Godfried Augenbroe, CP Oct. 94,

p420-435.

Integrated Design-Process Model, Victor E. Sanvido and Kevin J. Norton, ME Sept./Oct. 94, p55-62. Methods to Control Wind-Induced Building Motions, Ah-san Kareem, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p654-659.

Object Maps for Developing Automated Working Drawing Quality Control Procedures, M. Kevin Parfitt, (Comput ing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1787-1790.

Object-Oriented Modeling of Design System for RC Buildings, Ziga Turk, Tatjana Isaković and Matej Fischinger,

CP Oct. 94, p436-453.

One Peachtree Center: Atlanta Georgia, Housh Rahimza-deh and M. Nasim Akhtar, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p164-

Precedents in Design: A Computational Model for the Organization of Case Knowledge, Rivka Oxman, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p438-445.

Prisms and Antiprisms, Pieter Huybers and Gerrit van der Ende, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p142-151.

Qualification System for Building Engineers in Japan, Katsumi Yano, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p211-214.

Representing Design Cases Based on Methods, B. Raphael, B. Kumar and I. A. McLeod, (Computing in Civil Engineering, Khalii Khozeimeh, ed., 1994), p255-292. Scaling Up is Hard to Do: Experiences in Preparing a

Case-Based Design Aid Prototype for Field Trial, Eric A. Domeshek, Craig M. Zimring and Janet L. Kolodner, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p430-437.

A Sketch is Worth a Thousand Rule Traces, Renate Fruchter, Mark J. Clayton, Helmut Krawinkler and Paul Teicholz, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p1473-1480.

Some Lessons from Australian Experience, George R. Walker, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p249-258.

Strengthening the Design/Construction Interface Using Electronic Imaging, Document Management and Work Flow Technologies, Jorge A. Vanegas, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p600-

Synopsis of a Manual on Structural Fire Protection, T. T. Lie and E. L. Schaffer, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1002-1005. Technological Advance in Japanese Building Design and Construction, Anthony C. Webster, 1994, 0-87262-

932-5, 107pp.

Tentative Provisions for the Development of Seismic Reg-ulations for Buildings, Roland L. Sharpe, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p116-121.

Building frames

Critique on Building Envelope Sessions, Peter R. Sparks, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p529-532

Engineering of the Building Envelope "To Do Or Not To Do", Norris Stubbs and Dale C. Perry, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994),

p10-30.

Failure of Residential Building Envelopes as a Result of Hurricane Andrew in Dade County, Florida, Clifford Oliver and Chris Hanson, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p396-508.

Instantaneous Optimal Control of Building Frames, C. C. Chang and Henry T. Y. Yang, ST Apr. 94, p1307-1326.

Nonlinear Analysis of Structural Frameworks Using Supercomputing Techniques, Christopher M. Foley and Sriramulu Vinnakota, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2058-2065.

Resistance Mechanisms in RC Building Frames Subjected to Column Failure, Haluk Sucuoğlu, Ergin Çıtıpıtıoğlu and Sinan Altın, ST Mar. 94, p765-782.

Seismic Behavior of Type PR Steel Frames, K. S. Sivakumaran and Sanjiang Chen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p585-590.

A Simplified Method of Multistory-frame Analysis Includ-ing the P-Δ Effect, Hani Melhem and Khalid Niazi, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p1302-1309.

Successes and Failures of Metal Building Systems During Hurricane Andrew, Nanette Dean, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p465-471.

Buildings

Advanced Uses of Pen Computers in Building Inspection, Raja R. A. Issa, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1454-1457. An Application of a Coulomb Damped Mass Device, Apostolos Fafitis and Debra S. Larson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p399-404.

ATLSS Connectors in Semi-Rigid Composite Connections, Alan M. Rosa, Le-Wu Lu and B. Vincent Viscomi, (Structures Congress XII, N. C. Baker, ed. and Barry J.

Loodno, ed., 1994), p1149-1154.

Behavior of Tall Frame Combining Rigid and Semi-Rigid Connections, Norimitsu Kishi, Wai-Fah Chen, Yoshiaki Goto and Ken-ichi G. Matsuoka, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1185-1190

The Body Language of Tensile Structures, Todd Dalland, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed.,

1994), p990-999

Building Construction Detailed Estimating Practices in Saudi Arabia, Kamal M. Al-Harbi, David W. Johnston

and Habib Fayadh, CO Dec. 94, p774-784.

Building Performance Founded on an Improved Sand in Recife, Brazil, J. F. T. Jucá, A. O. C. Fonte and I. D. S. Pontes Filho, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1202-1213.

Building Procurement by Design and Build Approach, Is-saka Ndekugri and Adrian Turner, CO June 94, p243-

Building Product Model, A First Brick in Computer Integrated Construction, Michael J. Riley and Hamid H. R. Sabet, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p767-777.

Case-Based Preliminary Building Design, Simon F. Bailey and Ian F. C. Smith, CP Oct. 94, p454-468.

Checklist of Critical Success Factors for Building Projects, M. K. Parfitt and V. E. Sanvido, ME July 93, p243-249. Combatting 'Sick Building Syndrome', CE Jan. 94, p20-

Computer Based Energy Analysis for Mechanical Retrofit of Buildings, Joseph Staib, Matt Syal and David Peters, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1349-1356.

Computerized Building Settlement Analyses for a Contam-inated Groundwater Remediation Project, James A. McKelvey, III, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1228-1235.

Construction Process Innovation Through SMART Sys-tem, Yusuke Yamazaki and Junichiro Maeda, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1583-1590.

Criteria for Acceptable Wind-Induced Motions, Nicholas Isyumov, (Structures Congress XII, N. C. Baker, ed. and

Barry J. Loodno, ed., 1994), p642-647.

Cyclical Behavior of Welded Steel Shear Studs, Kurt Michael McMullin and Abolhassan Astaneh-Asl, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1024-1029.

Damping Systems for Controlling Wind Induced Motions of Structures, Ahsan Kareem and Yukio Tamura, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p845-850.

Debate Continues Over Steel-Weld Performance, CE Aug. 94, p17.

Developing an Object Based Planning System for Precast Concrete Building Structures, John I. Messner, Victor E. Sanvido and Masaaki Ikeda, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1426-1429.

Different Methods to Compute Pollutant Dispersion Around Buildings, R. Panneer Selvam and Alan H. Huber, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p92-98.

Dynamic Compaction: Two Case Histories Utilizing Innovative Techniques, Albert A. Bayuk and Andrew D. Walker, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p55-67.

Earthquake Barrier Technology: Sliding-Friction Energy Dissipation, Marc S. Caspe, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1018-1023.

Effectiveness of Storm Shutters in Hurricane Damage Prevention, Raja R. A. Issa, Camille A. Issa, Ajay Shanker vention, Raja R. A. Issa, camille A. Issa, Ajay Shanker and Paul Gencorelli, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p486-495.

Erosion Hazards and Coastal Construction Deficiencies Observed on Kauai After Hurricane Iniki, A. Todd Davison, Charles E. Bornman and Melvin Nishihara, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p736-745.

Estimation of Structural Damping of Buildings, Yukio Tamura, Masaaki Yamada and Haruhiko Yokota. (Structures Congress XII, N. C. Baker, ed. and Barry J. Lood-

no, ed., 1994), p1012-1017.

Evaluation of Wood Floor Vibration Design Criteria, R. E. Kalkert and J. D. Dolan, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p520-525.

Fires Deemed to Have Tested Structural Performance, Paul R. De Cicco, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p990-995.

Floor to Wall Anchors in Historic Brick Buildings, W. Bradford Cross and Nicholas P. Jones, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p1569.

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Gothic Structure and Design: Narbonne Cathedral, Vivian Paul and Robert Warden, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1568.

Heads I Win, Tails You Lose, CE Apr. 94, p8.

Hi-Tech Seismic Rehabilitation of 'Casino De Montreal', Claude Pasquin, Avtar Pall and Rashmi Pall, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1292-1297.

A High Level and Real Time Integration Approach for CAD Systems, Mustafa Alshawi, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1779-

Hurricane Andrew - The Ultimate Curtain Wall Test, James Hayes Larkin, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p424-429.

Impediments to the Implementation of Seismic Isolation, Ronald L. Mayes, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p128-133.

Improving the Performance of Architectrual Glazing in Hurricanes, Joseph E. Minor and Richard A. Behr, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p476-485.

Ed., 1994), Priores.
Information Modeling and Applications, Victor E. Sanvido, Kirby A. Kuntz, Theodore D. Lynch, John I. Messner and David R. Riley, (Computing in Civil Engineering, Khalil Khoazuneh, ed., 1994), p786-789.

Innovative Design of Steel Gable Frames, Thomas Sputo, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno. ed., 1994), p337-342.

Intelligent Construction Planning, A. Warszawski and O. Shaked, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p972-979.

Investigation of L'Ambiance Plaza Building Collapse, Daniel A. Cuoco, David B. Peraza and Thomas Z. Scarangello, CF Nov. 92, p211-231.

Knowledge-Based Design of Project-Procurement Process, R. A. Mohsini, CP Jan. 93, p107-122.

Knowledge-Based System for Wind Damage to Buildings, Kishor C. Mehta, Douglas A. Smith and Ronald H. Cheshire, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p726-735.

Liquefaction-Induced Damage to Buildings in 1990 Luzon Earthquake, Kohji Tokimatsu, Hisaya Kojima, Shinichi Kuwayama, Akio Abe and Saburoh Midorikawa, GT

Feb. 94, p290-307.

Long-Term Monitoring of Civil Structures using Smart Structures Techniques, T. Russell Gentry, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1392-1402.

Macroelement Model for Shear Wall Analysis, Jerome M. James and Sashi K. Kunnath, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1505-1512. Modeling of a Knowledge-Based Object-Oriented CAD System for Architectural and Structural Design, Undine Kunze, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1791-1797.

Multi-Objective Optimization of Construction Schedules,

Multi-Objective Optimization of Construction Scienciares, Tadeusz Kasprowicz, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p185-190. Negative Shear Lag in Framed-Tube Buildings, Y. Singh and A. K. Nagpal, ST Nov. 94, p3105-3121. Nonlinear Analysis of Structural Frameworks Using Super-

Nonlinear Analysis of Structural Frameworks Using Super-computing Techniques, Christopher M. Foley and Sriramulu Vinnakota, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2058-2065. Object-Oriented Process Modeling to Support Cooperative Planning in Industrialized Building Construction Pro-ject, Yusuke Yamazaki, (Computing in Civil Engineer-

ing, Khalil Khozeimeh, ed., 1994), p998-1005.

Probabilistic Evaluation of Human Perception Threshold of Ioodonisale Evaluation of Buildings (0.125Hz to 6.0Hz), Horizontal Vibration of Buildings (0.125Hz to 6.0Hz), Jun Kanda, Yukio Tamura, Kunio Fujii, Tamio Ohtsuki, Kiyoto Shioya and Shinji Nakata, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p648-653

Progress in Reinforced Concrete Column Design, R. Green, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p455-460.

Prototype Object-Oriented System for Maintenance of Timber Trusses, S. H. C. Foo and G. Akhras, CP July 94,

p326-344.

Random Vortex Models in Wind Engineering, George Turkiyyah, Dorothy Reed and Jiyao Yang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

Research and Development — Why bother? Robert J. Tichy, (Structures Congress XII, N. C. Baker, ed. and

Barry J. Loodno, ed., 1994), p683-688.
Response Study of a Flexible Building Using Three Earthquake Records, M. Çelebi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1220-1225

Seismic Analysis of Reinforced Concrete Building Using Finite-element Techniques, Tom Panayotido and Jayant Vir, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1091-1098.

Seismic Fragility Analysis of Sheahan Pumping Building, Howard H. M. Hwang, Ah Lim Ch'ng and Hui-Mi Hsu, (Structures Congress XII, N. C. Baker, ed. and Barry J.

Loodno, ed., 1994), p1006-1011.

Seismic Retrofit of R/C Columns with Inadequate Lap Splices, R. S. Aboutaha, M. D. Engelhardt, J. O. Jirsa and M. E. Kreger, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1502-1507.

Seismic Strengthening of URM Buildings with Steel Bracing, Durgesh C. Rai, Subhash C. Goel and William T. Holmes, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p809-814.

Barry J. Loodino, ed., 1374), poursoir.
Seismic Upgrades Using Energy Dissipation Devices,
David Bleiman, (Structures Congress XII, N. C. Baker,
ed. and Barry J. Loodino, ed., 1994), p1274-1279.
Selecting Precast Concrete Building Systems, John I. Mess-

ner, Victor E. Sanvido and Masaaki Ikeda, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p368-371

SemiActive Structural Control: A Low Cost Fix for An Infrastructure at Risk, C. C. Kuo, H. Wu, L. Liu, R.L. Sack, A. Ebrahimpour and W. N. Patten, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p387-392. Simplified Simulation Model Development for Construc-

tion Projects, Amr A. Oloufa, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p362-367.

Stability Analysis of Optimal Active Control Systems with Stability Analysis of Optimal Active Control Systems with Time-Delay and Other Influence Parameters, Franklin Y. Cheng and Peter Tian, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p.286-295.
State-of-the-Art Report on Seismic Performance of Unreinforced Masonry Buildings, Michel Bruneau, ST Jan. 94, e220-25.

p230-251.

Story-Drift, Shear, and OTM Estimation from Building Seismic Records, S. T. Mau and V. Aruna, ST Nov. 94, p3366-3385.

The Structural History of the Jacob Bachmann Tavern, Jack R. Kayser and Kristina Lammi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1570.

The Structuring of a New Architectural Landscape, Karen Van Lengen, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U.

Penalba, ed., 1994), p956.

Study Takes Stock of Metal Building, CE Aug. 94, p8.
Surface Pressures on the Roof of the Texas Tech Experimental Building: Model and Full-Scale, Henry W. Tiele-man, (Structures Congress XII, N. C. Baker, ed. and

man, (Structures Congress Att, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1445-1450.

A Survey of Building Performance in Hurricane Iniki and Typhoon Omar, James W. Sheffield, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994),

p446-455

Tolerable Deformations, Harvey E. Wahls, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1611-1628.

U.S. / Japan Large Scale Cooperative Research Program for Steel Structures, Robert D. Hanson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p103-108.

Using GIS Technology to Assess Hurricane Damage, C. S. Papacostas, Wayne M. Hamaguchi, Harold S. Hamada and John Jaquess, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p607-616.

Utilizing Visco-Elastic Dampers in the Seismic Retrofit of a Thirteen Story Steel Framed Building, Patrick Crosby, James Kelly and J. P. Singh, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994),

p1286-1291.

When are Loads Taught? A Case Study and National Trends. Richard J. Schmidt, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1358-

Buildings, hotels

Can You Top This?, CE Aug. 94, p8.

Buildings, nonresidential

Builders Don't Have to be Perfect, CE Jan. 94, p27. Critique of Commercial Structures, Herbert S. Saffir, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani,

net Phate; North A. Cook, ed. and Membras Sotani, ed., 1994), p472-475. Design and Construction Deficiencies and Building Code Adherence, Mohammed S. Khan and Wimal Suaris, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p133-146.

Performance of Commercial Masonry Structures in Hurri-cane Andrew, Geoffrey W. Blaney, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994),

p456-464.

Successes and Failures of Metal Building Systems During Hurricane Andrew, Nanette Dean, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p465-471.

Buildings, office

Civilian Structures: Taking the Defensive, Paul Wei-dlinger, CE Nov. 94, p48-50.

Lateral Load Resisting Systems for Circular Buildings, Robert J. McNamara and Brent R. Goldstein, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p636-641.

Messeturm Tower: Frankfurt, Germany, Irwin G. Cantor and Ahmad Rahimian, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1550-1555.

Buildings, residential

Assessment of Building Damage Sustained During Hurricane Iniki (Comparison with Hurricane Iwa), Michael K. H. Yee and Arthur N. L. Chiu, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p102-110.

Beliefs about Hurricane Andrew, Construction, and Evacuation, Earl J. Baker, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p31-36.

Building Code Enforcement Issues, Hindsight and Foresight, John C. Pistorino, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook ed and Mehrded Sotoni ed. 1994) -125-123 Cook, ed. and Mehrdad Sotani, ed., 1994), p125-132

Design and Construction Deficiencies and Building Code Adherence, Mohammed S. Khan and Wimal Suaris, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad So-

for the ruture, Rohand A. Cook, ed. and inclined 35-tani, ed., 1994), p133-146. Effectiveness of Retrofit in Multi-Family Apartments, Roger Durand, Richard C. Allison and Judith Durand, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

p412-415.

Failure of Residential Building Envelopes as a Result of Hurricane Andrew in Dade County, Florida, Clifford Oliver and Chris Hanson, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p396-508

The Human Impact of Hurricane Iniki, James K. Mitchell, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad So-

tani, ed., 1994), p259-267.

Overview of Hurricane Andrew in South Florida, Ronald A. Cook, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p70-83.

Overview of Hurricane Iniki, Arthur N. L. Chiu, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed.,

1994), p92-101.

Performance of Metal-Plate-Connected Wood Truss Roof Systems During Hurricane Andrew, Ramon M. Riba, Michael H. Triche and Charles Hoover, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p632-641.

Relationship Between Residential Insurance Losses and Wind Conditions in Hurricane Andrew, Peter R. Sparks and Shiraj A. Bhinderwala, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p111-124.

The Slender Tower of 52-54 East End Avenue, Ahmad Rahimian, (Structures Congress XII, N. C. Baker, ed.

and Barry J. Loodno, ed., 1994), p1562-1567.

Some Lessons from Australian Experience, George R.

Walker, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p249-258.

Survivability of Manufactured Housing in Hurricanes, John M. Dye, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p176-184.
Uplift Resistance of Plywood and OSB Roof Sheathing, S.

D. Shiff, D. P. Mizzell and M. D. Zaitz, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1054-1059.

Use of Composite Timber-concrete Floors in Residential Buildings, B. H. Ahmadi and M. P. Saka, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p508-513.

Wind Tunnel Testing of High-Rise Residential Buildings in Hurricane Areas, Peter A. Irwin, Mark A. Hunter, Mark Mosbat and Sanjeev M. Shah, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p663-673.

Bulk density

A Piezoelectric Sediment Density Probe, I. R. McDermott, A. D. King and S. J. Smyth, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p239-248.

Pot-Nets, Delaware, Wetland Habitat and Beneficial Uses of Dredged Material Project, Edward T. Fulford and Robert E. Tunnell, Jr., (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1451-1460.

Buoyancy

Alternative Formulation of Laterally Averaged Hydrodynamics, John Eric Edinger, Edward M. Buchak and Zhenyu Zhang, HY July 94, p886-890.

Buoyant Advection of Gases in Unsaturated Soil, Gregory E. Seely, Ronald W. Falta and James R. Hunt, EE Sept./

Oct. 94, p1230-1247.

MAC3D: Multiblock Numerical Model for Hydraulic Applications, Robert S. Bernard, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p507-511.

Buoyant jets

Field Tests on Small Marine Outfall, James J. Sharp, EE Mar./Apr. 94, p471-477.

A Lagrangian Model for Surface Buoyant Jets, Maneesha Joshi and J. F. Atkinson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p487-491.

Modeling Horizontal Round Buoyant Jets in Shallow Water, A. J. Johnston, C. R. Phillips and R. E. Volker,

HY Jan. 94, p41-59.

Simulation of Round Buoyant Jet in Stratified Flowing Environment, G. A. Bemporad, HY May 94, p529-543.

Buoy Directional Wave Measurements Using Magnetic Field Components, David W. Wang, C. C. Teng and R. Ladner, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p316-329.

A Comparison of Three Wave-Measuring Buoys, Anand Gnanadesikan and Eugene A. Terray, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and

J. Michael Hemsley, ed., 1994), p287-301.

Design and Testing of the NDBC Wave Processing Mod-ule, Joel N. Chaffin, William Bell, Kathleen O'Neil and Chung-Chu Teng, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p277-286.

Design Waves and Wave Spectra for Engineering Applications, Chung-Chu Teng, Gerald L. Timpe, Ian M. Palao and David A. Brown, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hems-

ley, ed., 1994), p993-1007.

Implementation and Validation of a Global Third-Generation Wave Model at Fleet Numerical Oceanography Center, Paul A. Wittmann and R. Michael Clancy, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p406-

Instrumented Buoy Network Response to Ocean Swell, Theodore Mettlach and David Gilhousen, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and

J. Michael Hemsley, ed., 1994), p28-44.

NDBC Wave Data-Current and Planned, K. E. Steele and Theodore Mettlach, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p198-207.

New Program for the Marine Observation and Prediction Center of the Central Weather Bureau, Beng-chun Lee, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p124-

On Hurricane-Generated Seas, Michel K. Ochi, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p374-387.

The Re-derivation of the NDBC Wind-Wave Algorithm,

Ian M. Palao and David B. Gilhousen, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p569-575.

A Sonobuoy-Sized Expendable Air-Deployable Direction-al Wave Sensor, Marshall D. Earle, Ralph H. Orton, Harry D. Selsor and Kenneth E. Steele, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p302-315.

Spectral and Parametric Wave Models of Lake Erie, David J. Welsh and Keith W. Bedford, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p217-221.

Wave Monitoring in The Southern California Bight, W. C. O'Reilly, R. J. Seymour, R. T. Guza and D. Castel, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p448-

Bureau of Reclamation

Applying Sustainable Development, Thomas E. Mitchell,

CE Dec. 94, p62-64.

Reclamation and Water Conservation, Craig R. Phillips, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p573-576.

Buried pipes

Basics of Flexible Pipe Structural Design, R. C. Prevost and K. K. Kienow, TE July/Aug. 94, p652-671.

In-Situ Nondestructive Testing of Buried Precast Concrete Pipe, Dennis A. Sack and Larry D. Olson, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p499-507. New Modulus of Soil Reaction - E' Values for Buried

Thermoplastic Pipe Design, Jey K. Jeyapalan and Peggy A. Jaramillo, (Hydraulics of Pipelines, Deon T. Fowles,

A. Jaramillo, (tryarautics of Pipeimes, Deon 1. Fowles, ed. and Douglas H. Wegener, ed., 1994), p239-260.
 Pipe Uplift Resistance in Frozen Soil and Comparison with Measurements, A. Foriero and B. Ladanyi, CR Sept. 94,

p93-111.

urry Trenching for Waterway Pipeline Installation, Samuel Carreon and Brian Doeing, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed.,

1994), p261-279.
Standard Practice for Direct Design of Buried Precast Concrete Pipe Using Standard Installations (SIDD) (St No. 93-015), American Society of Civil Engineers, 1994, 0-

87262-995-3, 50pp.
Vacuum Design of Welded Steel Pipe Buried in Poor Soil, Reynold K. Watkins and George J. Tupac, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p226-238.

Buried structures

Discrete Modeling of Soil-Structure Interaction Under Dynamic Loading, Grzegorz Bak, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p873-876.

Ruses

Dwell-Time Effects of Low-Floor Bus Design, Jonathan C. Levine and Gwo-Wei Torng, TE Nov./Dec. 94, p914-929

Business administration

Business Reengineering in a South American Oil Company, Matilde G. de Pena and Deborah J. Fisher, ME July/ Aug. 94, p45-51.

Database Use in the Engineering Office, Charles E. Bowler, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1874-1879.

The Mexican Migration, Virginia Fairweather, WP Spring 94, p13-18.

Mixed-Use Business Park Developments in Space: A Real-Estate Paradigm, Charles J. Lauer, Joseph P. Hopkins, Hugh M. Kelso, Brent Sherwood and Dana G. Andrews, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1471-1481.

Ownership Transfer of Design Engineering/Construction Firms, James J. Casey, Jr. and Jeffrey S. Russell, ME

Mar./Apr. 94, p66-67. Survival Skills, Michael A. Branton and Curry W. Kirkpatrick, CE June 94, p68-69.

A Value Chain Model to Support Business Process Reengineering in Turnkey Contracting Firm, K. C. Choi, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1575-1582.

Vietnam: Firsthand Feedback, Virginia Fairweather, WP Spring 94, p9-12.

Vietnam: Taming the Tiger, Irwin Jay Robinson, WP Spring 94, p6-8. What is the Market Value of Your Firm? William F. Peck, ME Mar./Apr. 94, p15-17.

Business cycles

Consolidation in the Environmental Engineering Industry, Paul J. Zofnass, ME May/June 94, p13-17.

Cable cars

Cable-Based Lunar Transportation System, Leonhard E. Bernold, AS Jan. 94, p1-16.

Akashi-Kaikyo Bridge Underconstruction, Fumio Nishino, Takeo Endo and Shin Kitagawa, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p779-780.

Cable Systems with Elastic Supporting Elements, James W. Charland, Alan G. Hernried and Marvin R. Pyles, ST Dec. 94, p3649-3665.

Cable-Based Lunar Transportation System, Leonhard E. Bernold, AS Jan. 94, p1-16. Deployable Mesh Reflector, Z. You and S. Pellegrino, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p103-112.

Design and Construction of the Cable-Staved Wooden Space Truss Roof, Kei Sadakata and Hong Wan, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994),

p810-819

Direct and Modal Analyses for Shape-Finding of Unstable Structures, Tetsuyuki Tanami and Yasuhiko Hangai, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p714-723.

Dynamic Behavior of Nonlinear Cable System. III, Dan M. Ghiocel and Dario A. Gasparini, EM Dec. 94, p2694-

Dynamics of Elastic Cable Under Parametric and External Y. Cai and S. S. Chen, EM Aug. 94, Resonances, p1786-1802.

Elasto - Plastic Analysis of Cable Net Structures, J. L Meek, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p781-790.

History and Development of Fabric Structures, R. E. Shaeffer, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penal-

ba, ed., 1994), p979-989.

Intermediate Support Cable Logging Systems, James W. Charland, Alan G. Hernried and Marvin R. Pyles, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p791-800. Poisson Effect in Extensive Cables with Both Ends Fixed,

John V. Huddleston and Hee-Jung Ham, EM July 94,

p1590-1595.

Safety Analysis of Suspension-Bridge Cables: Williams burg Bridge, John Matteo, George Deodatis and David P. Billington, ST Nov. 94, p3197-3211.

Software for marina anchoring design on chains or cables, Gilles Collin, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed.,

1994), p398-405.

Structural Tests on the "Suspen-Dome" System, Mamoru Kawaguchi, Masaru Abe, Tatsuo Hatabo, Ikuo Tatemichi, Satoshi Fujiwara, Hiroaki Matsufuji, Hiroyuki Yoshida and Yoshimichi Anma, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p383-392.

Transient Response of Guyed Telecommunication Towers Subjected to Cable Ice-Shedding, Ghyslaine McClure and Na Lin, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U.

Penalba, ed., 1994), p801-809.

Experimental Study on the Strut Type of Cable Net Membrane Structures, Masao Saitoh, Akira Okada, Hiroaki Tabata and Toshio Mochizuki, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p573-582.

Glossary of Marine Fiber Rope Terms, Task Committee on Marine Fiber Rope of the Waterways, Port Coastal and Ocean Division of ASCE, (Bill Remley, chmn.), 1993,

0-87262-896-5, 80pp.

Wind Deflection Probability Analysis, Benjamin J. Biller, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p869-874.

Cadastral surveys

Creation of a Modernized Land Information System for Milwaukee County, Kurt W. Bauer, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p220.

Creation of Land Information System for Milwaukee County, Wisconsin, Kurt W. Bauer, SU Nov. 94, p156-

GPS Goes Real Time, Carl W. Sumpter and Gregory W. Asher, CE Sept. 94, p64-66.

Modeling Heavy Metal (Cadmium) Uptake by Soil-Plant Root System, Sandhya Rao and Shashi Mathur, IR Jan./

Large-Scale Loading Tests of Shallow Footings in Pneumatic Caisson, Osamu Kusakabe, Yoshito Maeda and Masatoshi Ohuchi, GT Nov. 92, p1681-1695.

Model Tests on Caissons, Sreenivas Alampalli and Venkatanarayana Peddibotla, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p325-336.

Scale Effect on Impulsive Wave Forces and Reduction by Submerged Breakwater, Tsutomu Sakakiyama and Masaharu Ogasawara, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p628-641.

Calcium

Hydration Mineralogy of Cementitious Coal Combustion By-Products, Gregory J. McCarthy and J. K. Solem-Tishmack, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p103-121.

Progress in Understanding the Structure and Thermodyogress in Understanding ure statement of the market of Calcium Silicate Hydrates, Annemarie Meike, Maria Onofrei, Carol J. Bruton and Brian E. Viani, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2590-2596.

"The Effect of Zero Gravity on Bones", Elizabeth Cassell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p853-856.

Calcium aluminate

Durability of Calcium Aluminate Cement Concretes, A Capmas and C. M. George, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p377-405.

Calcium carbonate

Fluid Inclusion Studies of Calcite Veins from Yucca Mountain, Nevada, Tuffs: Environment of Formation, Edwin Roedder, Joseph F. Whelan and David T. Vani-man, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1854-1860.

Inferences of Paleoenvironment From Petrographic, Chemical and Stable-Isotope Studies of Calcretes and Fracture Calcites, David T. Vaniman and Joseph F. Whelan, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2730-2737.

Paleoclimatic and Paleohydrologic Records From Secondary Calcite: Yucca Mountain, Nevada, Joseph F. Whelan, David T. Vaniman, John S. Stuckless and Richard J. Moscati, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Campaigne 1994) 2723 2745 Committee, 1994), p2738-2745.

Calcium sulfate

Fluxes and Mineralizers in the Clinkering Process, A. Palomo, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p64.

Utilization of Phosphogypsum-Based Slag Aggregate in Portland Cement and Asphaltic Concrete Mixtures, Paul T. Foxworthy, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p75-

Calibration

3D model verification for a groyne and harbor experiment, P. Mewis and K. -P. Holz, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p905-909.

Ambrose, R. B. T. S. Wu and S. C. McCutcheon, (Hydrau-

Ambrose, K. B. I. S. Wu and S. C. McCutencon, (rygrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p890-894. Calibration and Validation of a Cross-Shore Transport Model, J. Nicholson and B. A. O'Connor, (Coastal Dy-namics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p586-598.

Calibration of a Highway Traffic Assignment Model for the Manhattan Central Business District, V. Papayannoulis, J. C. Falcocchio and L. Maynus, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p720-

Calibration of Current Factors in LRFD for Steel, David V. Rosowsky, Ahmed F. Hassan and N. V. V. Phani Kumar, ST Sept. 94, p2737-2746.

Calibration of Movable Bed Model for Armant Area, F. S. El-Gamal and A. F. Ahmed, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p119-128.

Calibration of Poorly Identifiable Systems: Application to Activated Sludge Model, Marcos von Sperling, EE May/June 94, p625-644.

Computer-Controlled, Precision Pressure Standard, Othon K. Rediniotis, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p509-518.

Determining Optimal Parameter Dimensions for Water Dis-tribution Network Models, Keshaw N. Mallick, Kevin E. Lansey and Kevin S. Tickle, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and

Harry N. Tuvel, ed., 1994), p758-761.

Developing Air Concentration and Velocity Probes for Measuring Highly-Aerated, High-Velocity Flow, Kathleen H. Frizell, David G. Ehler and Brent W. Mefford, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p268-277

Estimation of Peak Flow and Runoff Volume with Response Surface Method, Shie-Yui Liong and Yaacob Ibrahim, WR Mar./Apr. 94, p161-175.

Inverse Transient Analysis in Pipe Networks, James A. Liggett and Li-Chung Chen, HY Aug. 94, p934-955.

Visual Investigation of Field Bed-Load Sampling, Moustafa T. K. Gaweesh, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p233-241. Worldwide Calibration of API RP2A-LRFD, R. C. Turner,

C. P. Ellinas and G. A. N. Thomas, WW Sept./Oct. 94,

p423-433.

After the Quake: Why One Building Still Stands, CE June 94, p32,35.

After the Quake: Why One Building Still Stands (ltr), CE Sept. 94, p28,30.

Aftershocks: The Legacy of Loma Prieta, John Prendergast, CE Jan. 94, p46-49.

ASCE Investigators Take a Look at Los Angeles' Lifelines in Earthquake's Aftermath, NE Apr. 94, p2-3.

California Airports: Ground Access Vehicle Trips, Emissions and Emission Reduction Strategies, Thomas J. Higgins, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p102-126.

California Blimp Hangars, Framed in Wood, Are Landmarks, CE Oct. 94, p70.

A California First: Engineered, CE Dec. 94, p12,14.

California Toll Road Off to 'Fastrak' Start, CE May 94, p19-20. California Water District Eyes Seismic Retrofits, CE Nov.

94, p19.

Caltrans Seismic Rehab in Fast Lane, CE June 94, p11. Caltrans Toll Bridges to Go Electronic, CE June 94, p19-

Changes in Los Angeles Code May Protect Wood Struc-tures (ltr), CE Nov. 94, p32.

Changing Conditions and Water Elections, Charles H. Lawrance, James M. Stubchaer and Jon A. Ahlroth, WR July/Aug. 94, p458-475.

Civil Engineer Peirano, a Gold Miner's Great-Grandson. Endows Environmental Faculty Chair at Berkeley, NE Mar. 94, p16.

Debate Continues Over Steel-Weld Performance, CE Aug. 94, p17.

Do You Know the Way to ASCE's San Jose Branch?, CE Sept. 94, p76-77.

Doubling A Pipeline, Gary Walker and John Myrick, CE Jan. 94, p50-53.

Drinks Are On the House, CE Nov. 94, p8.

Early Voided-Slab Structure was Made From Conventional Concrete (ltr), CE Aug. 94, p26.

Earthquake Didn't Devastate Water System, CE May 94, p36

The Evolving Role of Marinas as Public Marine Parks and Water Recreation Areas in Southern California 1960-1994, John C. Corrough, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p39-48.

Fiber Matrix Bonds Soil to Charred Hills, CE June 94, p91. Franklin Matthias, Builder of Hanford Works, Dies at 85,

NE May 94, p16.

Geosynthetics Conquer the Landfill Law, Luther Derian, Edward Kavazanjian, Jr., Michael S. Snow and Kelly M. Gharios, CE Dec. 93, p50-53.

Habitat Restoration Using Dredged Material: The Sonoma Baylands Wetland Demonstration Project, Scott P. Miner, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p928-937.

Hydrodynamic Modeling of San Diego Bay, Parmeshwar L. Shrestha, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p140-

Keller Canyon Fills a Need, Jill Shapiro and Lawrence H. Roth, CE Oct. 93, p44-47.

Microtunneling Goes West, CE Aug. 94, p16-17.

Nonlinear Analysis and Experimental Validation of a Stiffening Truss Chord of the Golden Gate Bridge, R. A. Dameron, R. S. Dunham and J. C. Castro, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1106-1114.

The Northridge Warning Has 3-D Design Been Lost?, CE Dec. 94, p6.

Northridge: Questioning Our Codes, Virginia Fairweather, CE June 94, p60-63.

Not Just Wallowing in the Mire, CE Aug. 94, p8.

Overcrossing a Freeway with Water Pipelines in Dedicated Structures, Richard J. Pardini, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p387-394.

Performance of Wood-Framed Structures in the January 17, 1994, Northridge Earthquake, David J. Akers, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p662-668.

Quake Aid on the Way, CE Mar. 94, p114.

RCC For Seismic Design, Noel C. Wong, Michael P. Forrest, Sr. and Sze-Hang Lo, CE Sept. 94, p60-62. Reclaiming Water With Wetlands, Christie Moon Crother, CE July 94, p52-55.

Recycling Center Digs Diamonds From the Rough, CE Oct. 94, p20-21.

Relocated Canal Leads to Future Reservoir, CE Feb. 94, p19-20.

Report Near on Condition of L.A. Metro Tunnel, CE Jan. 94, p22.

Report: Specs Not Met but Los Angeles Metro Tunnel 'Structurally Adequate', CE May 94, p24-25. Reversal of Fortune in Design-Build Terms, CE Mar. 94,

p19-20. Richard Pomeroy, 88, Dies; Known for Work on Hydrogen

Sulfide in Sewage, NE Feb. 94, p11. Road to Recovery, Ray Zelinski, CE Apr. 94, p36-39.

Roof-Project Coordinator Recalls Good Times (ltr), CE Apr. 94, p35.

A Salmon Population Model for Evaluating Alternative Flow Regimes, John M. Bartholow and Terry J. Waddle, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p877-880.

Seismic Evaluation of the Macy Street Bridge, Los Ange-les, California, Using 3-D Nonlinear Pushover Methodologies, John C. Castro and Jason S. Maxwell, (Comput ing in Civil Engineering, Khalil Khozeimeh, ed., 1994). p1099-1105.

Seismic Rehab Continues on Steel-Framed Buildings, CE Oct. 94, p12,14.

Settlement of Deep Compacted Fills in California, Ernesto E. Vicente, Gerald M. Diaz and Allen M. Yourman, Jr., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1124-1134.

Start-ups, CE Apr. 94, p8. Start-ups, CE May 94, p8.

Start-Ups, CE June 94, p8.

Start-ups, CE July 94, p8.

Start-ups, CE Aug. 94, p8.

Start-ups, CE Nov. 94, p8.

Study Takes Stock of Metal Building, CE Aug. 94, p8. Trash Collection Goes High-Tech, CE Aug. 94, p78.

The Use of Coda Waves for Characterizing the Site Effect on Strong Ground Motion, Keiiti Aki and Byau-Heng Chin, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p579-584.

The Use of SCADA for Real-time Calculation and Moni-toring for CT Compliance at the Ralph D. Bollman Water Treatment Plant, Peter Schoemann and Peter Martin, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2112-2123.

Velocity Control Rings for RC Pipe on Steep Slopes, Glen Drogin, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p928-

Wave Monitoring in The Southern California Bight, W. C. O'Reilly, R. J. Seymour, R. T. Guza and D. Castel, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p448-457

With Base Isolation, You Can't Break City Hall, CE Sept. 94, p14.

'Repeat' Quakes May Cause Fewer Deaths, More Damage, CE Nov. 94, p19,21.

California bearing ratio

Reinforcing Sand With Strips of Reclaimed High-Density Polyethylene, Craig H. Benson and Milind V. Khire, GT May 94, p838-855.

Resilient Moduli of Granular Materials, Musharraf Zama Dar-Hao Chen and Joakim Laguros, TE Nov./Dec. 94, p967-988.

Cameras

Analysis of Selected Prototype Wave and Runup Data, Todd L. Walton, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p913-917

Development of a Visual Method to Track the Movement of Hydrogen Bubbles in a Laboratory Flume, Athanasios N. Papanicolaou and Panayiotis Diplas, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p205-212.

Real-time Motion Vision for Robot Control in Unstruc-tured Environments, John Woodfill, Ramin Zabih and Oussama Khatib, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p10-18.

Campbell, Bill

ASCE Offers Options for Funding Atlanta's Infrastructure Renewal Program, NE Nov. 94, p1,3.

Canada

Arsenic Removal by Manganese Greensand Filters, Thon Phommavong and T. Viraraghavan, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p646-653.

The Canadian Approach in the Design of Wood Structures: Conversion to Limit States Design, Dominique P. Janssens, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p514-519.

The Canadian Cement Industry: A Partner in Environmental Improvement, Eric G. Fines, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep

and Concrete, Michael W. Ortuzeck, ed. and Shondeep L. Sarkar, ed., 1994), p406-423.

The Cigar Lake Analog Study: An Interational R&D Project, Jan J. Cramer and F. Peter Sargent, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2237-2242.

Contract Awarded for Canadian Bridge, CE Jan. 94, p8. A Cooperative Agreement for Research on Radioactive Waste Management Between the United States Department of Energy and Atomic Energy of Canada Limited, Kenneth W. Dormuth and Robert A. Levich, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2409-2412. Doubling A Pipeline, Gary Walker and John Myrick, CE

Jan. 94, p50-53.

Excavation Damage and Organic Growth in a 1.2m Diameter Borehole, R. A. Everitt, D. A. Brown, D.M. Boychuk and P. Gann, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Commit-tee, 1994), p2092-2100.

Fraser Lands Riverfront Park Shoreline Edge Treatments, Stanley R. Cowdell and Harold C. Westerman, (Mari-

nas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p114-123.

NAFTA Opens Markets to U.S. Engineers, CE Jan. 94, p114.

Safeguarding the Disposal of Canada's Used Nuclear Fuel, P. Baumgartner and G. R. Simmons, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p1782-1790.

Sediment Transport by Wind Waves, Long Waves and Mean Currents: An Experiment on Nearshore Morphodynamics, Lake Huron, Canada, Troels Aagaard and Brian Greenwood, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p14-28.

Sensitivity of Radiological Impacts of a Waste Disposal System to Radionuclide Sorption in the Geosphere, T. W. Melnyk, J. McMurry and F. P. Sargent, (High Level Radioactive Waste Management, High Level Radioac-

tive Waste Program Committee, 1994), p1222-1228. Tunnelers Assess Markets and Machines, CE Aug. 94, p14. Verification of the AECL Total System Performance Models, Keith Kersch and Steve Oliver, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p2437-2441.

Canal design
Design for Tunnel-Type Sediment Excluder, U. C.
Kothyari, P. K. Pande and A. K. Gahlot, IR Jan./Feb. 94,

Lacey Divergence Equations for Alluvial-Canal Design, S. V. Chitale, HY Nov. 94, p1320-1326.

Normal-Depth Equations for Irrigation Canals, Prabhata K. Swamee, IR Sept./Oct. 94, p942-948.
Relocated Canal Leads to Future Reservoir, CE Feb. 94,

p19-20.

CE Dec. 94, p62-64.

Canal-Control Needs: Example, A. J. Clemmens, G. Sloan and J. Schuurmans, IR Nov./Dec. 94, p1067-1085

Design for Tunnel-Type Sediment Excluder, U. C. Kothyari, P. K. Pande and A. K. Gahlot, IR Jan./Feb. 94,

Diaphragm Height of Ejector of Uniform Sediment, Nan-dana Vittal and G. A. Shivcharan Rao, HY Mar. 94, p398-405.

Downstream Control Algorithm for Irrigation Canals, Fubo Liu, Jan Feyen and Jean Berlamont, IR May/June 94, p468-483.

Drawdowns for Leaky-Aquifer Flow with Storage in Finite-Width Sink, Louis H. Motz, IR July/Aug. 94, p820Effects of Lateral Heading Flow Steadiness on Lateral Spillage, Eduardo A. Latimer, Michael R. Petersen and Andrew A. Keller, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p115-118.

Expert Analysis in Regulated Irrigation Canal Modelling, Forrest M. Holly, Jr. and John P. Parrish, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R.

Rumer, ed., 1994), p92-96.

Flow Capacity through Wide and Submerged Vegetal Channels, M. W. Abdelsalam, A. F. Khattab, A. A. Khalifa and M. F. Bakry, IR Sept./Oct. 92, p724-732.

Measuring Water in Trapezoidal Canals, Zohrab Samani and Henry Magallanez, IR Jan./Feb. 93, p181-186.

New Technology for Navigation Entrance Black River Canal, Larry Osborn, Kevin MacIntosh and Dave Werren, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994),

Normal-Depth Equations for Irrigation Canals, Prabhata K.

Swamee, IR Sept./Oct. 94, p942-948

Performance of Submerged Vanes for Control of Sediment in an Irrigation Canal, Steven W. Tanis, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1181-1185.

Seepage from Canal to Asymmetric Drainages, Abate T. Wolde-Kirkos and A. S. Chawla, IR Sept./Oct. 94,

Thermo-Hydrodynamic Modelling of the Chicago Sanitary and Ship Canal, Ejaz Mohammad and Forrest M. Holly, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1306-1310.

A Three-Dimensional Numerical Simulation of Seasonal Flow and Salt Transport in the C&D Canal, Bernard B. Hsieh, David R. Richards and Jeff Gebert, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p595-599.

Transient Canal Seepage to Sloping Aquifer, Sheik M. H. Yussuff, H. S. Chauhan, Manoj Kumar and V. K. Srivas-

tava, IR Jan./Feb. 94, p97-109.

Atkinson, HY Oct. 94, p1126-1138.

Vortex-Tube Sediment Extractors. Part I: Trappi Efficiency, Edmund Atkinson, HY Oct. 94, p1110-1125. Vortex-Tube Sediment Extractors. Part II: Design, Edmund

Does Current Cancer "Risk Assessment" Harm Health? Bruce N. Ames, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p121-122.

Canopies

The Price is Right for Composite Canopy, CE May 94, p14.

Design of Cantilever Steel Beams: Refined Approach, Hesham S. Essa and D. J. Laurie Kennedy, ST Sept. 94, p2623-2636.

Design of Frames Using Notional Horizontal Force, S. Toma, J. Takamatsu and N. Nishihata, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1161-1166.

Shear-Stress Distribution in Symmetrically Tapered Cantilever Beam, Edwin P. Russo and Gregory Garic, ST Nov. 92, p3243-3249.

Spanning the Grand Canyon, Jerry A. Cannon and Robert D. Turton, CE Nov. 94, p38-41.

Optimal Capacity-Expansion Planning in Multiaquifer Sys tems, Hakan Başagaoglu and Hasan Yazıcıgil, WR Nov./Dec. 94, p836-856.

Probabilistic Design of Open Drainage Channels, Said M.

Easa, IR Nov./Dec. 92, p868-881.

Reliability Analysis of Open Drainage Channels under Multiple Failure Modes, Said M. Easa, IR Nov./Dec. 94, p1007-1024.

Capital costs

Optimal Groundwater Reclamation with Captial Costs, Teresa B. Culver and Christine A. Shoemaker, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p177-

Capital improvement

Channel Stabilization and Retrofit, Ken Nilsen, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p718-

Getting the Project Started, Daniel G. Hacker, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p1-7.

Capsules

Hydraulics of Stationary Capsule in Pipe, Henry Liu and James L. Richards, HY Jan. 94, p22-40.

Tensile Fracture of Carbon Whisker Reinforced Cement Based Composites, B. Mobasher and C. Y. Li, (Infra-structure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p551-558.

TEM Studies of Carbonation and ASR, G. W. Groves, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p211-216.

Thermal Regeneration of Spent Lithium Hydroxide, Ven-katesh Srinivasan and Bernadette Luna, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1036-1045

Utilization of Liquid Carbon Dioxide for Planetary Exploration, Nobuki Kawashima, Ei-ichi Mizuno, Kazuya Takeda and Masaki Kojima, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1070-1076.

Carbon monoxide

Breakout Session 5B: Microscale Modeling, Paul Benson, Don DiCristofaro, Richard Schoeneberg and John Zamurs, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p156-157.

Carbon Formation Theory for Space Oxygen Processes, Peter E. Nolan, Andrew Hall Cutler and David C. Lynch, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokai, ed., 1994), p1199-1209.

Carbonate rocks

Isotopic Studies of Yucca Mountain Soil Fluids and Car-bonate Pedogenesis, Ted A. McConnaughey, Joseph F. bonate retoigenesis, 1ed A. McConnagney, Joseph L Whelan, Kimberley P. Wickland and Richard J. Moscati, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2584-2589.

Late Glacial to Modern Climate Near Yucca Mountain Nevada, Richard M. Forester, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2750-2754.

Strontium Isotope Geochemistry of Soil and Playa Deposits Near Yucca Mountain, Nevada, Brian D. Marshall and Shannon A. Mahan, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2685-2691.

Chloride Extraction and Re-Alkalization of Reinforced Concrete Stops Steel Corrosion, Emmanuel E. Velivasakis, Sten K. Henriksen and Richard Hauer, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1127-1134.

Anaerobic Biodegradation of Chloroform under Methanogenic Conditions, Devesh, Munish Gupta, Makram T. Suidan and Gregory D. Sayles, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p609-616.

Biodegradation of 2,4-Dinitrotoluene in a Two Stage Sys-tem, S. L. VanderLoop, M. T. Suidan, M. A. Moteleb and S. W. Maloney, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p710-717.

After 11 Years at ASCE's Helm, Ed Pfrang Reflects on the Society, the Profession and Himself, NE Nov. 94, p1-2. Business Engineer: Role for Consulting Civil Engir Year 2000, Mel Sears, ME Mar./Apr. 94, p35-38

Creating Business-Development Talent through Mentor-ing, Michael Lee Smith, ME Mar./Apr. 94, p44-47.

Digger's Decline: A Fable for Civil Engineers, John A. Alexander, EI July 93, p304-308.

Let's Keep this Private, CE Sept. 94, p8.

Proactive Career Management, Glenn E. Schirmer, ME Jan./Feb. 94, p33-36.

Using Marketing Techniques in Your Job Search Can Yield Good Results, NE Feb. 94, p11.

Cargo handling

Efficient Path Planning Strategies for Unmanned Rover Vehicles, Kevin K. Gifford and George W. Morgenthaler, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1288-1308.

Logistics Carriers for the First Lunar Outpost, Thomas M. Polette, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1046-1058.

Surface Payload Unloading and Deployment Options for a Lunar Return Mission, John Connolly and Larry Toups, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1059-1069.

Carter, Archie N.

Archie Carter, Engineering Consultant who Covered the World, Dies at 83, NE July 94, p15.

Cartographic Characterization of the Littoral Camps of Dunes, Jesús Martínez Martínez, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p462-475.

Glossary of Mapping Science, ISBN: 1-57083-011-8, Joint Committee of the American Society of Civil Engineers, American Congress on Surveying and Mapping, and American Society for Photogrammetry and Remote Sensing, 1994, 0-7844-0050-4, 581pp.

Chicago's Waterfalls, Rita Robison, CE July 94, p36-39.

Case reports

1988 Armenia Earthquake. I: Seismological, Geotechnical, and Structural Overview, M. K. Yegian, V. G. Ghahraman and G. Gazetas, GT Jan. 94, p1-20.

Advances and Challenges in Case Based Design, Gerhard Schmitt, Simon F. Bailey and Ian F. C. Smith, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p301-309.

Aesthetic Issues in Timber Bridges, Frederick M. Law, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1268-1273.

Airport Reconstruction/Rehabilitation: A Case Study, Steven B. Cornell, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p516-

Behavior of Gravelly Soils During Seismic Conditions An Overview, M. E. Hynes, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p117-120.

Business Reengineering in a South American Oil Company, Matilde G. de Pena and Deborah J. Fisher, ME July/

Aug. 94, p45-51.

Case History of a Collapsible Soil Fill, Alan L. Kropp, David J. McMahon and Sandra L. Houston, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1531-1542.

Case Storage of Planning Knowledge for Power Plant Construction, Ren-Jye Dzeng and Iris D. Tommelein, (Computing in Civil Engineering, Khalil Khozeimeh, ed.,

1994), p293-300.

Case Studies of Extreme Wave Analysis: A Comparative Analysis, Gerbrant van Vledder, Yoshimi Goda, Peter Hawkes, Etienne Mansard, Maria Jesus Martin, Martin Mathiesen, Eric Peltier and Edward Thompson, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p978-992.

Case Studies: Clay Cover Cracking Analysis Using FEM Techniques, Robert Y. Liang, John C. Lommler, Suckhong Lee and Bob Meyers, (Fracture Mechanics Applied Techniques) plied to Geotechnical Engineering, Luis E. Vallejo, ed.

and Robert Y. Liang, ed., 1994), p86-101. Case Study of Burlington Cable-Stayed Bridge, Kevin E. Swiggum, Stuart D. Anderson and Jeffrey S. Russell, CO Sept. 94, p649-666.

Case Study of Debris Flow, Robert W. Day, CF Aug. 94, p192-200.

Case Study of Development of Distance-Learning Course, D. A. Langford, T. Bilham, R. Fellows and R. Newcombe, El Oct. 94, p333-340. Case Study of Modified Bituminous Mixtures: Somerset,

Kentucky, Amy L. Simpson and Kamyar C. Mahboub, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p88-96. Case Study of Navy Pier Pile Foundation Installation,

Case-Based Design in the SEED System, Ulrich Flemming, Robert Coyne and James Snyder, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p446-453.

Case-Based Preliminary Building Design, Simon F. Bailey and Ian F. C. Smith, CP Oct. 94, p454-468.

Collecting Sediment Environmental and Geotechnical Data Using an Impact Core Sampler, James M. Schmidt, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p279-

Constructing Around Contamination, Edward A. Wood, Jill R. Crosbie and Richard A. Brown, CE Oct. 94, p50-

Consulting-Firm Values Slip during 1993, NE Apr. 94, p5. Contracting for Tiedback Walls on a Design-Build Basis, Hubert J. Deaton, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p17-23.
Course-in-a-Box, CE Mar. 94, p76-77.

Course-in-a-Box, CE Mar. 94, p76-77.

Creation of a Modernized Land Information System for Milwaukee County, Kurt W. Bauer, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p220.

Critical Analysis of Time and Cost of Management and Traditional Contracts, Shamil G. Naoum, CO Dec. 94, p687-705

The December 1992 Storm at the New York Mud Dump Site, Scott McDowell, Brian May and Douglas Pabst, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p786-

Decision-Making Paradigm for Risk Assessment of Hazecision-Making Faradigii ioi Risk Assessibili of Indi-ardous Wastes Using Fuzzy Sets, Timothy Ross, Joseph Trumm and Sunil Donald, (Computing in Civil Engi-neering, Khalil Khozeimeh, ed., 1994), p200-207.

Deformations in Granular Soils Due to Cyclic Loading, P. M. Byrne and J. McIntyre, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1864-1896.

Demonstration of Equipment for Dredging Contaminated Sediments at Buffalo River, Buffalo, New York, B. Thomas Kenna, Daniel E. Averett, Paul A. Zappi and Stephen M. Yaksich, (*Dredging* '94, E. Clark McNair, Jr., ed., 1994), p885-895.

Demonstration of Pneuma Dredging Technology, Giovanni Faldi and Timothy L. Gahring, (*Dredging '94*, E. Clark

McNair, Jr., ed., 1994), p1047-1049.

Design of Dredge Containment and Dewatering Facilities, John M. Logigian, Edward A. Dudek, Jr. and Michael R. Palermo, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1230-1239.

Design/Construction of a CFD Over Dredged Sludge, Jeffrey D. Horsfall and Katherine E. Martin, (*Dredging* '94, E. Clark McNair, Jr., ed., 1994), p1250-1259.

Dioxin Capping Management and Monitoring Program: loxin Capping Management and Monitoring Program: Design and Implementation, Brian May, Douglas Pabst and Scott McDowell, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1027-1036.

Dredging in the Bering Sea St. George Island 1993-94 Harbor Dredging Project, William J. Gerken and Jeffrey F. Gilman, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1426-1435.

Dredging of Fishing Harbour, Walvis Bay, Keith Mackie, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1037-

Dynamic Compaction of Saturated Silt and Silty Sand - A Case History, Jean C. Dumas, Nelson F. Beaton and Jean-François Morel, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p80-89.

Dynamic Compaction: Two Case Histories Utilizing Innovative Techniques, Albert A. Bayuk and Andrew D. Walker, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p55-67.

Eagle Harbor Superfund Project, Eric E. Nelson, Amy L. Venderheiden and A. David Schuldt, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1122-1131.

Earthquake Fault Rupture Propagation Through Soil, Jonathan D. Bray, Raymond B. Seed, Lloyd S. Cluff and H. Bolton Seed, GT Mar. 94, p543-561.

Environmental Mediation and Open-Water Disposal, Joseph D. Germano, (Dredging '94, E. Clark McNair, Jr., sepi D. Germania, 167-168.

ed., 1994, p160-169.

Environmental Monitoring and Mitigation: Harbor Tunnel Dredging and Disposal Operations, Boston, Massachu-

setts, Curtis A. Meininger and Alan D. Randall, (Dredgsetts, Cutta A. Mellinger and Alain D. Kaindari, (Dreaging '94, E. Clark McNair, Jr., ed., 1994), p1471-1480.

Estimating Annual Urban Nonpoint Pollutant Loads, Robert D. Chandler, ME Nov./Dec. 94, p50-59.

Evaluation of Remedial Options for the Sitcum Waterway Sediments: A Case Study, John R. Verduin, III, Garry E. Horvitz and Richard C. Gilmur, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p555-566.

Even with Innovative Materials, the Basics Still Matter,

James Warner, (Infrastructure: New Materials Methods of Repair, Kim D. Basham, ed., 1994), p72-79. Evolution of Cable Arm Clamshell Bucket, J-P. Pelletier,

R. Santiago and J. Lajeunesse, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1050-1060.

McNair, fr., ed., 1994), p1050-1060.
Failure as Source of Engineering Judgment: Case of John Roebling, Henry Petroski, CF Feb. 93, p46-58.
Failure of Large Diameter High Density Polyethylene Sewer Pipe a Case in Point, Jey K. Jeyapalan and Joe A. Conner, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p356-371.
Graphic Visualization for Planning Heavy Lifts, Parmanand V. Dharwadkar, Koshy Varghese, James T. O'Connor and Thomas M. Gatton, (Computing in Civil Engineering, Khall Khozeimeh, ed., 1994), p759-766.
Habitat Restoration Using Dredged Material: The Sonoma Baylands Wetland Demonstration Project, Scott P. Miner, (Oredging '94, E. Clark McNair, Ir., ed., 1994),

Miner, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p928-937

Identifying Causes of Failure in Providing Geotechnical and Environmental Consulting Services, Douglas C. Moorhouse and Richard A. Millet, ME May/June 94, p56-64.

Implementation of Knowledge-Based GIS: A Case Study, Gary S. Spring, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1332-1338.

In Situ Sediment Treatment of Dofasco Boatslip, Hamilton Harbour, Tom Murphy, Henry Brouwer and Jay Babin, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1071-

In-Situ Treatment of Hazardous Sediment, Lyman Wible, Stacy McAnulty, Robert Stanforth, Ajit Chowdhury and Mick Warner, (*Dredging '94*, E. Clark McNair, Jr., ed.,

Mick Warner, (Dredging '94, E. Clark McNaır, Jr., eu., 1994), p468-473.
Internal Pipeline Corrosion Coatings Case Studies and Solutions Implemented, Ronald E. Carlson, Jr., (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p206-211.
Jet Grouting Gains, Paul Tarricone, CE Dec. 94, p40-43.
Liquefaction and Embankment Failure Case Histories, 1988 Armenia Earthquake, M. K. Yegian, V. G. Ghahramen and B. N. Harutjuman GT Mar, 94, p581-596.

man and R. N. Harutiunyan, GT Mar. 94, p581-596.

Liquefaction in Silty Soils: Design and Analysis, W. D. Liam Finn, R. H. Ledbetter and Guoxi Wu, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p51-76.

Management of Dredged Material Disposal for San Francisco Bay Projects, Thomas H. Wakeman and Jacob Harari, (Dredging '94, E. Clark McNair, Jr., ed., 1994),

Management of San Diego Bay Dredged Material Dispos-al, Dan Muslin, (Dredging '94, E. Clark McNair, Jr., ed.,

1994), p332-341. Marathon Battery Superfund Project - A Review of Design, Construction and Lessons Learned, Michael P. Taylor, Pamela N. Tames and Alan R. Elia, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1210-1219.

Monitoring of a dredging operation using innovative sediment tracing techniques, Jonathan Marsh, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1360-1369.

Multimedia Approach to Case-Based Structural Design, Mary Lou Maher and Bala Balachandran, CP July 94, p359-376.

New Bedford Harbor, Massachusetts Dredging/Disposal of PCB Contaminated Sediments, Mark J. Otis, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p579-587.

Ocean Disposal with Capping of Dioxin Contaminated Sediment: New York Case History #1, Monte Greges, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1278-

PC Networking - A Case Study, Chester J. Zaremba, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1867-1873.

Pilot-Scale Demonstrations of Thermal Desorption for the Treatment of Contaminated River Sediment, B. Thomas Kenna, David Conboy, Judith Leithner, Daniel Averett and Stephen Yaksich, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p474-483.

A Practical Perspective on Liquefaction of Gravels, Julio E. Valera, Michael L. Traubenik, John A. Egan and Jon Y. Kaneshiro, (Ground Failures Under Seismic Conditions.) Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p241-257.

Racine's Water Street Retaining Wall, Steven W. Hunt, Randy L. Frank, Paul A. Tarvin and James J. Blazek, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p137-154.

Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, (Orville T. Magoon, chmn.), 1994, 0-7844-0044-X, 443pp.

Rehabilitation of Belle Isle Siphon in Boston, Massachu-setts, Emile Hamwey and Lisa Harris, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p247-256.
Relation of Praxeology to Engir Chadderton, El Oct. 94, p384-391.

to Engineering, Ronald A.

Reliability of Flood Warning Systems, Roman Krzyszto-fowicz, Karen S. Kelly and Dou Long, WR Nov/Dec. 94, p906-926.

Replacement of a Failed Embankment Designed to Accommodate Large Settlement: A Case Study, B. Kent Merritt and Gary M. Wantland, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p364-375. Representation of Case Memory for Structural Design,

Mary Lou Maher, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2030-2037.

Restoration and Capping of Contaminated Sediments, Carl E. Stivers and Robert Sullivan, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1017-1026.

Review of Wetting-Induced Collapse in Compacted Soil, Evert C. Lawton, Richard J. Fragaszy and Mark D. Heth-erington, GT Sept. 92, p1376-1394.

Settlement Measurements of 50-ft High Embankments at the Chesapeake & Delaware Canal Bridge, Ed Brylawski, Poh C. Chua and Edward S. O'Malley, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1149-1163.

Short Aggregate Piers Defeat Poor Soils, Nathaniel S. Fox, Evert C. Lawton and Richard L. Handy, CE Dec. 94,

p52-55.

Soil Improvement to Mitigate Settlements under Existing Structures, H. R. Al-Alusi, (Vertical and Horizontal De formations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1214-1223.

Soil Nailing Saves Distressed Timber Wall, James Harmston and Gary W. Rhodes, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p130-

Streamlining Project Estimating and Scheduling, David Angelotti, CC Feb. 94, p11-13.

Success Syndrome: The Collapse of the Dee Bridge, Henry Petroski, CE Apr. 94, p52-55

Sudden Pressure Drop and Pipeline Failure - Case Studies, E. John List, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p339-355.

Surficial Stability of Compacted Clay: Case Study, Robert W. Day, GT Nov. 94, p1980-1990.

Technological Advance in Japanese Building Design and Construction, Anthony C. Webster, 1994, 0-87262-932-5, 107pp.

Urban Drainage Rehabilitation Programs and Techniques, Edited by William A. Macaitis, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drain age Rehabilitation Programs and Techniques, ASCE, 1994, 0-7844-0038-5, 223pp.

Use of Abandoned Pipeline to Transport Sediment to Marshes, Charles H. Coates, Jr., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1101-1110.

Using Computer Programs to Develop As-Built Schedules, Jason M. Jazayeri, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p191-196.

Water-Treatment-System Design for Turbidity Removal. II: Optimization, H. B. Dharmappa, O. Fujiwara, J. Verink and S. Vigneswaran, EE July/Aug. 94, p921-942

The Welland River Dredging Demonstration, Philip Miles and Donald Marr, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1061-1070.

What Do Project Managers (need to) Know About CADD? Stephen M. Benz, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1884-1891.
When are Loads Taught? A Case Study and National Trends. Richard J. Schmidt, (Structures Congress XII, N.

. Baker, ed. and Barry J. Loodno, ed., 1994), p1358-1363.

Cassidy, John J.

ASCE Elevates 13 of Its Own to Honorary Membership. NE May 94, p3.

Atlanta Ceremony Celebrates 13 New Honorary Members of ASCE, NE Dec. 94, p2-3.

Cast iron

Behavior of Cast-Iron Spillway Gate Wheels, Dimos Po-lyzois and Walter J. Muzyczka, MT Nov. 94, p495-512. Evaluation of Cast Iron Columns for Safety and Reliabili-

ty, Joel S. Weinstein, William Lamartina and Mark Tamaro, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1544-1549.

Cast-in-place structures

Continuity in Precast Prestressed Concrete Girder Bridges, O. Abdalla, J. A. Ramirez and R. H. Lee, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p479-484.

Interpretation of Nondestructive Integrity Tests Using Artificial Neural Networks, Glenn J. Rix, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1346-1351.

Analysis of the Causes and Triggering Events of Disastrous Torrent Flood, Milivoje Brajković and Zoran Gavrilo-vić, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p640-644.

Computational Discretization Effect on Rainfall-Runoff Simulation, Edward Mazion, Jr. and Ben Chie Yen, WR Sept./Oct. 94, p715-734.

Estimation of Peak Flow and Runoff Volume with Response Surface Method, Shie-Yui Liong and Yaacob Ibrahim, WR Mar./Apr. 94, p161-175.

Prediction of Sediment Yield, U. C. Kothyari, A. K. Tiwari and Ranvir Singh, IR Nov./Dec. 94, p1122-1131.

Cavitation

Influence of Liquid Length Variation in Hydraulic Transients, Enrique Cabrera, José Abreu, Rafael Pérez and Antonio Vela, HY Dec. 92, p1639-1650.

A New Basic Principle for a New Series of Hydraulic Measurements. Erosion by Abrasion, Corrosion, Cavitation and Sediment Concentration, Lucien Chincholle, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p301-310. Numerical Comparison of Pipe-Column-Separation Mod-

els, Angus R. Simpson and Anton Bergant, HY Mar. 94, p361-377.

The Use of Piezoelectric Film in Cavitation Research, Saurav Paul, Christopher R. Ellis and Roger E. A. Arndt, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p454-471.

Velocity Control Rings for RC Pipe on Steep Slopes, Glen Drogin, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p928-

Cavitation control

How to Improve Control of Flow and Reduce Cavitation, Ergun Bakall, Michael T. Stift and Paul W. Johnson, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p89-103.

Cavities

Three-Dimensional Dynamic Response of Twin Cavities due to Traveling Loads, F. Guan and I. D. Moore, EM Mar. 94, p637-651.

Using Cavity Well to Determine Aquifer Thickness and Constants, Mohammad Saleem, IR May/June 94, p504-

Cavity expansion

State Parameter from Self-Boring Pressuremeter Tests in Sand, H. S. Yu, GT Dec. 94, p2118-2135.

Ceilings

Roofless in Seattle, CE Sept. 94, p8.

Cellular structures

Compressive Strength of Large Scale HSLA-80 Steel Cel-lular Sections of a Double Hull Ship Structure, Alan Ah-Kum Pang, James M. Ricles, Le-Wu Lu and Perry Green, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1538-1543.

Torsion of Regular Multicellular Members, Donald L. Dean, ST Dec. 94, p3675-3678.

Cement grouts

Fracture Behavior of Cement Grouted Sand, C. Vipulanandan, A. Ata and S. Mebarkia, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p147-159.

Structural Characteristics of the Danby Pipe Renovation System, Shuaib Ahmad and George McAlpine, (Infrastructure: New Materials and Methods of Repair, Kim

D. Basham, ed., 1994), p239-246.

Cement paste

Automated Crack Identification for Cement Paste, D. Darwin, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p613.

Characterization of Cement-Aggregate Interfaces by Electrical Conductivity Methods, Xie Ping and J. J. Beaudoin, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p15-25.

Chloride Diffusivity Computation for Cement Paste, E. J. Garboczi and D. P. Bentz, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p159-173.

Estimation of the Thickness of Transition Zone in Concrete and Characteristics of Transition Zone in High-Strength Concrete, Hiroshi Uchikawa, Shunsuke Hanehara and Daisuke Sawaki, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p616.

Microstructure of the Paste - Aggregate Interface, Includ-ing the Influence of Mineral Additions, J. P. Ollivier and M. Massat, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994),

p175-185.

Microstructure, Image Analysis, and Fly Ash in Hardened Cement Paste, Sidney Diamond, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p337.

Paste Rheology, Leslie J. Struble and Mark A. Schultz, (Cement Manufacture and Use, Paul W. Brown, ed.,

1994), p147-158.

TEM Studies of Carbonation and ASR, G. W. Groves, (Ce-ment Manufacture and Use, Paul W. Brown, ed., 1994), p211-216.

Cementation

Cementing Action in Non-Portland Cement Systems: Sul-Pho-Pozzolanic and Silico-Pozzolanic Reactivity, R. T. Hemmings and E. E. Berry, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p329-336.

Cements

Admixture Applications in Large Concrete Pours, Augus-tine Uchechukwu Elinwa, MT Aug. 94, p352-356.

Advanced Concepts in Cement Solidification and Stabilization Technology, D. L. Cocke, M. Y. A. Mollah, T. R. Hess and R. K. Vempati, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p614-615.

Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994, 0-7844-0034-2.

Advances in Strain-Hardening Cement Based Composites, Victor C. Li, (Advances in Cement and Concrete, Mi-chael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p235.

Advances in the Characterization of Cement Clinker, Hiroshi Uchikawa and Shunsuke Hanehara, (Cement Manufacture and Use, Paul W. Brown, ed., 1994),

p231-313.

The Canadian Cement Industry: A Partner in Environmen-tal Improvement, Eric G. Fines, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p406-423.

Carbon and Steel Microfiber-Reinforced Cement-Based Composites for Thin Repairs, Nemkumar Banthia and Sylvie Dubeau, MT Feb. 94, p88-99.

Cement and Concrete: Their Interrelation in Practice, Adam Neville, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p1-14.

Cement Manufacture and Use, Paul W. Brown, ed., 1994.

0-7844-0048-2, 324pp.

Cement Plant CKD Recovery System, S. M. Cohen and M. E. Prokesch, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p612.

Center Seeks Partner to Help Prove New Extrusion Process, ET Aug./Sept. 94, p9.

Characterisation of Anhydrous Cement Clinker by Backscattered Electron Imaging and Energy Dispersive X-Ray Analysis, K. L. Scrivener, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p79-81.

Sarkar, ed., 1994), p. 27-81.

Characterizing Fracture Behavior of Fiber-Reinforced Composites, Surendra P. Shah, Yixin Shao and Zongjin Composites, Michael W. Li, (Advances in Cement and Concrete, Michael Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994),

p186-199.

The Chemistry of MDF Materials, M. R. Silsbee and D. M. Roy, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p193-209.

Control of Aging Processes in Wastepaper Fiber Reinforced Cement, Parviz Soroushain, Jong-Pil Won and Jer-Wen Hsu, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p539-544.

Determination of Interfacial Debond Mode for Fiber-Reinforced Cementitious Composites, Victor C. Li and Yin-Wen Chan, EM Apr. 94, p707-719.

Durability of Calcium Aluminate Cement Concretes, A. Capmas and C. M. George, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p377-405.

Environmental Technology Management of the Cement Industry in India and Neighbouring Countries, A. K. Chatterjee, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p438-480

Environmental Uses of Cement in Waste Conditioning, F. P. Glasser, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994),

p499-507.

Evaluation of Commercial Wood-Cement Composites for Sandwich-Panel Facing, Gebran N. Karam and Lorna J. Gibson, MT Feb. 94, p100-116. Flexural Strength of Fiber Cementitious Composites,

Mohamed Maalej and Victor C. Li, MT Aug. 94, p390-

Flexural/Tensile-Strength Ratio in Engineered Cementitious Composites, Mohamed Maalej and Victor C. Li, MT Nov. 94, p513-528.

Fluxes and Mineralizers in the Clinkering Process, A. Palo mo, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p64. Fly Ash and Alkali-Aggregate Reaction, Michael Thomas,

(Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p362-376

Hydration Mineralogy of Cementitious Coal Combustion By-Products, Gregory J. McCarthy and J. K. Solem-Tishmack, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p103-121. Hydration of Aluminate Cements, Pierre Barrett and

Danielle Bertrandie, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed.,

1994), p132-174.

Hydraulic Conductivity Assessment of Slurry Wall Using Piezocone Test, M. Manassero, GT Oct. 94, p1725-1746. Immobilization of Heavy Metals in Cementitious Matrix, J. Tritthart, F. D. Tamas, M. Patkai-Horvath and E. Zinterl, (Advances in Cement and Concrete, Michael W Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p614.

Innovative Civil Engineering Material from Sewage Sludge: Biocement and Its Use As Blended Cement Material, Joo-Hwa Tay and Kuan-Yeow Show, MT Feb. 94,

p23-33.

Leaching from Cementitious Waste forms in Belowground Vaults, John C. Walton, EE Nov./Dec. 94, p1507-1523.

Long Term Performance of Fiber Reinforced Cements and Concretes, Arnon Bentur, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p223-234.

Magnesium-Sodium Sulfate Attack in Plain and Blended Cements, Rasheeduzzafar, Omar Saeed Baghabra Al-Amoudi, Sahel N.i Abduljauwad and Mohammad Maslehuddin, MT May 94, p201-222.

Management Strategy of Cement Industry in Technology Toward the Next Century, Hiroshi Uchikawa, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p524-561.

Mechanical Properties, Microstructure and Durability of Portland Cement-Based Systems Containing Micro-Reinforcement, Norman M. P. Low, I. Gagnon and J. J. Beaudoin, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994),

Microstructural Development in High-Volume Fly-Ash Cement System, Aimin Xu and Shondeep L. Sarkar, MT

Feb. 94, p117-136.

n200-216

Microstructure of the Paste - Aggregate Interface, Including the Influence of Mineral Additions, J. P. Ollivier and M. Massat, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994). p175-185.

Mineral Admixtures for Concrete - An Overview of Recent Developments, P. K. Mehta, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L.

Sarkar, ed., 1994), p243-256.

Mineral Admixtures in Cements for General Use and Special Purposes, Harold Roper, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p236-242.

Modeling of Fiber Pullout in Cement Based Composites Using an R-Curve Approach, B. Mobasher and C. Y. Li, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p559-566.

New Directions for Cement-Based Materials, J. Francis Young, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994),

p610-611.

New Formulation for Elastic Modulus of Fiber-Reinforced, Quasibrittle Matrices, Jamil M. Alwan and Antoine E. Naaman, EM Nov. 94, p2443-2460.

Phase Equilibria in the CaO - Al₂O₃ - SiO₂- H₂O System in Relation to Blended HAC Cements, K. C. Quillin, (Ad-vances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p615.

Polymer Cement Composite - A Critical Review, Satish Chandra, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994),

Progress in Understanding the Structure and Thermodynamics of Calcium Silicate Hydrates, Annemarie Meike, Maria Onofrei, Carol J. Bruton and Brian E. Viani, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2590-2596.

Raw Water Cement-Mortar Lined Pipeline Corrosion A Case Study, Charles F. Anderson, Jr., (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H.

Wegener, ed., 1994), p372-386.

Resilient Modulus Test Protocol for Cement Stabilized Phosphogypsum, Michael I. Pericleous and John B. Metcalf, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p491-498.

Small Diameter Fibers/Micro Fibers for Reinforcement of Thin Sheet Products, Ziad Bayasi and Jack Zeng, (Infra-structure: New Materials and Methods of Repair, Kim

D. Basham, ed., 1994), p380-385.

Tensile Fracture of Carbon Whisker Reinforced Cement Based Composites, B. Mobasher and C. Y. Li, (Infra-structure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p551-558.

Thermal Effects on Massive Concrete Pours, Toorak Zokaie and Timothy A. Osterkamp, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p27-34.

Treatment of Metal Industrial Wastewater by Fly Ash and Cement Fixation, C. H. Weng and C. P. Huang, EE Nov./Dec. 94, p1470-1487.

The Use of Secondary Products in the Cement and Concrete Industry, Bjarne Osbaeck, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p107-121.

Use of Synthetic Fibers for Reinforcement of Thin Sheet Cement Products, Nazmi Sharabi, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p545-550.

Use of Wastes as Fuels in the Cement Industry: Pros & Cons, Ferenc D. Tamás and Márta Pátkai-Horváth, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p82-102.

Utilization of Waste Solvent Fuels in Cement Manufacturing, Gregory S. Barger, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p41-55.

Wood Fiber Reinforced Cement Composites Under Wetting-Drying and Freezing-Thawing Cycles, Parviz Soroushian, Shashidhara Marikunte and Jong-Pil Won, MT Nov. 94, p595-611.

TIGER and Census Bureau Data in a GIS: A Powerful Combination for Civil Engineers, Robert W. Marx, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p225-232.

Center-pivot irrigation

Hydraulics of Center-Pivot Laterals, Edmar J. Scaloppi and Richard G. Allen, IR May/June 93, p554-567.

Centrifuge

A Conceptual Study of A Solar Power Satellite Using Centrifugal Force, Hiroshi Yamakawa, Hiroshi Kanamori, Kenji Nozaki, Takeo Oura, Takanori Sato, Hisahito Ta-dokoro, Kenji Takagi, Hiroshi Ueno, Koji Oishi, Haruyuki Namba and Shinji Matsumoto, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p57-63.

Ozonization of Anaerobic Sludge Dewatering Centrate for Ammonia Removal, K. Ramalingam, V. Diyamandoglu and J. Fillos, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p423-427.

Predicted Behavior of Two Centrifugal Model Soil Walls, See Keung Ho and R. Kerry Rowe, GT Oct. 94, p1845-

Centrifuge model

Deformation of Sand Foundations Induced by Earthquakes, Xiangwu Zeng, (Vertical and Horizontal Defor-mations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p726-739.

Evaluation of Consolidation Behavior of Mine Tailings, K. J. L. Stone, M. F. Randolph, S. Toh and A. A. Sales, GT

Mar. 94, p473-490.

An Investigation of the Reinforcing Effect of Stone Col-umns in Soft Clay, Doug Stewart and Martin Fahey, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p513-524.

Liquefaction Mechanism for Layered Soils, Gregg L. Fiegel and Bruce L. Kutter, GT Apr. 94, p737-755.

Liquefaction-Induced Lateral Spreading of Mildly Sloping Ground, Gregg L. Fiegel and Bruce L. Kutter, GT Dec. 94, p2236-2243.

Load-Settlement Prediction of Footings on Steep Slopes, Pedro Arduino, Emir J. Macari and Mark Gemperline, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1385-1399.

Shallow Tunnels in Cohesionless Soil: Stability of Tunnel Face, Pierre Chambon and Jean-François Corté, GT July

94, p1148-1165.

Swelling of Black Cotton Soil Using Centrifuge Modeling, A. D. Gadre and V. S. Chandrasekaran, GT May 94, p914-919.

Beach Nourishment in Presence of Seawall, Robert G. Dean and Chul-Hee Yoo, WW May/June 94, p302-316.

Analysis of Glass-Ceramic Production from Lunar Resources, W. H. Poisl, B. D. Fabes, D. Allen, S. Hawley and A. Carpenter, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1278-1287.

The Chemistry of MDF Materials, M. R. Silsbee and D. M. Roy, (Cement Manufacture and Use, Paul W. Brown,

ed., 1994), p193-209.

Development, Testing and Modeling of Ceramic Compos-ites for Lunar Applications, János C. Tóth and Chandra S. Desai, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p358-367.

Fire Resistance of Concrete-Filled, Fire-Resistant Steel-Tube Columns, Y. Sakumoto, T. Okada, M. Yoshida and

S. Tasaka, MT May 94, p169-184.

Performance Evaluation of Ceramic Filter Candles, Malay Chaudhuri, Sanjeev R. Verma and Anirban Gupta, EE Nov./Dec. 94, p1646-1651.

Processing of Lunar Materials, W. Howard Poisl and B. D. Fabes, AS July 94, p263-275.

Certification of a Spent Fuel Cask for Storage and Transportation, Meg Lusardi, Robert M. Bernero and Charles H. Haughney, (High Level Radioactive Waste Manage-ment, High Level Radioactive Waste Program Committee, 1994), p1168-1173.

The Development of a Packaging Handbook, L. B. Shap-pert, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p1237-1241.
PCI Plant and Personnel Certification for the Precast Concrete Industry, John S. Dick, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed.,

1994), p912-918.

Ouick Checks for Structural Computer Analysis, Brian Brenner, Cindy Gagnon and C. K. Shah, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2073-2080.

Bed-Level Variation in Channel Expansions with Movable Beds, P. K. Mohapatra and S. Murty Bhallamudi, IR Nov./Dec. 94, p1114-1121.

Integral Equation Model for Wave Propagation with Bottom Frictions, Philip L.-F. Liu and Yong-Sik Cho, WW

Nov./Dec. 94, p594-608.

Seepage Effects on Sand-Bed Channels, Achanta Ramakrishna Rao, Vedula Subrahmanyam, S. Thayumanavan and Damodaran Namboodiripad, IR Jan./Feb. 94, p60-

Step Pool Geometry and Flow Characteristics in Low-Sediment-Storage Channel Beds, Tamir Grodek, Moshe Inbar and Asher P. Schick, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p819-823.

Channel bends

Bridge-Pier Location and Ice Conveyance in Curved Channels, Gilberto E. Urroz, Joseph Schaefer and Robert Ettema, CR June 94, p66-72.

Evaluation of Methods for Predicting Bend Loss in Mean-dering Channels, C. S. James, HY Feb. 94, p245-253.

Expansion and Contraction of Powder River Between Moorhead and Broadus, MT: Geomorphic Observations and Numerical Modeling, James E. Pizzuto, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p984-988. Theoretically-Derived Regime River Width, Pierre Y. Ju-

lien, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p949-953.

Channel design

Design Strengths of Cold-Formed Channels in Bending and Torsion, K. T. Kavanagh and D. S. Ellifritt, ST May 94, p1599-1607.

No-Choke Flow in Trapezoidal Channels, Subhasish Dey, EM Oct. 94, p2224-2231.

Streamflow Related to Channel Geometry in Northern New England, Kevin J. Palaia and S. Lawrence Dingman, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p865-869.

Two-Dimensional Modelling of Flow in the River Sava, Rudi Rajar and Matjaž Četina, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p309-323.

Width and Depth-Constrained Best Trapezoidal Section, David C. Froehlich, IR July/Aug. 94, p828-835.

Channel erosion

Equilibrium Geometry of Channels with Cohesive Banks, R. G. Millar and M. C. Quick, (Hydraulic Engineering

794, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p964-968.
Riparian Wetlands and Flood Stages, F. Douglas Shields, Jr. and Charles M. Cooper, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p351-355.

Toe Scour Protection Methods, Stephen T. Maynord, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1035-1039.
Using Drop Structures for Stream Gaging, Bobby J. Brown, (Fundamentals and Advancements in Hydraulic

Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p21-26.

Channel flow

Anomalous Measurements in a Compound Duct, David G. Rhodes and Donald W. Knight, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p311-320.

Combination of an Automated Channel Network Extracting System and a Distributed Watershed Model in Estimation Rainfall-Runoff Processes, Ray-Shyan Wu, Yi-Shao Lai and Cheng-Hsung Liu, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p356-360.

Dimensionally Homogeneous Manning's Formula, Ben Chie Yen, HY Sept. 92, p1326-1332.

Field Measurements in a Tidal River Estuary on the Canta-brian Coast, Spain, D. A. Huntley, M. A. Losada, R. Medina, C. Vidal and K. Stapleton, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p143-157

Fortification of MMOC Models for Steep-Channel Flows, Chintu Lai, Der-Liang Young and Jen-Ter Chang, (Hy-draulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1290-1294.

A General Theory of Channel Adjustment in High Gradient Streams, Gordon E. Grant, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p817-818.

Impact Hydraulic Jump, Willi H. Hager, HY May 94,

p633-637

Modified Eddy Viscosity Model in Fully Developed Asymmetric Channel Flows, Whey-Fone Tsai and Robert Ette-

ma, EM Apr. 94, p720-732

A new approach for the estimation of extreme roughness in torrents by Hydraulic and Photogrammetry, Hanspeter Hodel, Thomas P. Kersten and Isidor Storchenegger, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p697-701.

and Raiph R. Munler, Cu., 1994, pb97-701.

Numerical Modelling and Laboratory Verification for the Turbulent Flow Field in the Branching Channel, Ke-Feng Li, Wen-Qian Zhao, Jia Li and Lin Luo, (Hydraulic Engineering '94, George V Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1295-1299.

Sandbar Formation in Side-Diversion Channels, Vincent Neary, Brian Barkdoll and A. Jacob Odgaard, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1171-1175.

Spatially Averaged Conservation Equations for Interacting Rill-Interrill Area Overland Flows, Gokmen Tayfur and M. Levent Kavvas, HY Dec. 94, p1426-1448

Step Pool Geometry and Flow Characteristics in Low-Sediment-Storage Channel Beds, Tamir Grodek, Moshe Inbar and Asher P. Schick, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p819-823.

Velocity Measurements in Asymmetric Turbulent Channel Flows, R. N. Parthasarathy and M. Muste, HY Sept. 94,

p1000-1020.

Channel improvements

Assessing the Impact of Channel Deepening in Delaware Bay Through Numerical Modeling, K. W. Kim, B. H. Johnson and J. Gebert, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p29-41.

Galveston Bay 3D Model Study, Channel Deepening, Cir-culation, and Salinity Results, R. Berger, W. Martin, R. McAdory and J. Schmidt, Estuarine and Coastal Mod-eling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swan-cor ed. 10044 byl. 32.

son, ed., 1994), p1-13.

Hocking River Sedimentation Study, Jon B. Fripp, Kenneth C. Halstead and Surya Bhamidipaty, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R.

Rumer, ed., 1994), p1120-1124.

A Three-Dimensional Numerical Simulation of Seasonal Flow and Salt Transport in the C&D Canal, Bernard B. Hsieh, David R. Richards and Jeff Gebert, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p595-599.

Tug Fork Flood Plain Modifications and Wetlands Mitigation, M. A. Ports, D. D. Dee, Jr. and C. Riling, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p766-769

Use of HEC-2 and HEC-6 to Determine Levee Heights and Revetment Toe Scour Depths, David T. Williams and David Cozakos, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1075-

Channel morphology

Bed Load Prediction in Steep Mountain Rivers, Tamotsu Takahashi and Toyoaki Sawada, (Hydraulic Engineering 94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p810-814.

1999, polto-619.
Characterization of Incised Channel Development, Chester C. Watson, Daniel Gessler and Ronald R. Copeland, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p969-973.

Chezy Formula Versus Theory and Common Sense, Witold Gustaw Strupczewski, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p662-666.

Energy Losses in Steep Tributary Streams at Flows Near The Threshold of Bedload Entrainment, Matthew D. O'Connor, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p778-

Erosion and Deposition by Debris Flows in Mountainous Channels on North Fork Mountain, Eastern West Virginia, Daniel A. Cenderelli and J. Steven Kite, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p772-776.

Expansion and Contraction of Powder River Between Moorhead and Broadus, MT: Geomorphic Observations and Numerical Modeling, James E. Pizzuto, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p984-988.

A General Theory of Channel Adjustment in High Gradient Streams, Gordon E. Grant, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p817-818.

A New Formula for Mean Velocity in Torrents, Hanspeter Hodel and Isidor Storchenegger, (Hydraulic Engineer-ing '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p667-671.

A Physically-Based Model of Channel Widening, Stephen E. Darby and Colin R. Thorne, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p944-948.

Channel stabilization

Determination of Geometry and Stress Distribution of an Optimal Stable Channel, Gregorio G. Vigilar, Jr. and Panayiotis Diplas, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p959-963

Mathematical Models to Assess Stream Dynamics, Laura Bittner, Yarko Niño and Marcelo García, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p391-395.

Channelization

de St-Venant Channel Routing in Distributed Watershed Modeling, Fred L. Ogden, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p492-496.

Kissimmee River Restoration Study, Hsieh Wen Shen, Guillermo Tabios, III and James A. Harder, WR May/ June 94, p330-349.

Channels, waterways

Application of Studies on the Overboard Placement of Dredged Sediments to the Management of Disposal Sites, William Panageotou and Jeffrey Halka, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p349-358.

At-A-Site Mountain River Flow Resistance Variation, James C. Bathurst, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

Banks, Glynn E. Michael P. Alexander and Allen Teeter, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p304-313.

Bridge-Pier Location and Ice Conveyance in Curved Channels, Gilberto E. Urroz, Joseph Schaefer and Robert Ettema, CR June 94, p66-72.

Channel Stabilization and Retrofit, Ken Nilsen, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p718-721

Clear-Water Scour around Abutments in Floodplains, Terry W. Sturm and Nazar Sadiq Janjua, HY Aug. 94,

p956-972.

Dioxin Contamination in Sediments of the Port of New York and New Jersey: The Search for Criteria, John F. Tavolaro and Joseph Olha, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p150-159.

Dredging Impacts on Delaware Estuary Tides, Joseph L. DiLorenzo, Poshu Huang, M. Llewellyn Thatcher and Tavit O. Najarian, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p86-104.

Effects of Commercial Vessel Passage in Narrow Channels With and Without Ice Cover, John G. Lyon, Donald C. Williams and Kevin G. Flannigan, CR June 94, p47-64.

Evaluation of Methods for Predicting Bend Loss in Mean-dering Channels, C. S. James, HY Feb. 94, p245-253.

Factors Affecting Degradation of Clay Masses, Paul A. Gil-bert, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p449-457.

Formulation of the Interagency Coordination Team for the Houston-Galveston Navigation Channels, Texas Project, Dalton H. Krueger, (Dredging '94, E. Clark McNair, Jr.,

ed., 1994), p378-383

ed., 1994), p.376-383.
Galveston Bay 3D Model Study, Channel Deepening, Circulation, and Salinity Results, R. Berger, W. Martin, R. McAdory and J. Schmidt, Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanger and 10045-bl.32. son, ed., 1994), p1-13.

General Formulation of Best Hydraulic Channel Section, Parviz Monadjemi, IR Jan./Feb. 94, p27-35.

GIS-Based Channel Extraction and Smoothing Algorithm for Distributed Hydrologic Modeling, Fred L. Ogden, Bahram Saghafian and Witold F. Krajewski, (Hydraulic

Bailer and Harden and Wilder Ragewski, (Variation Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p237-241.
History of Entrance Channel Dredging and Disposal Operations: St. Marys, Georgia/Florida, Joan Pope, J. Bailey Smith and Laurel T. Gorman, (Dredging '94, E. Clark

McNair, Jr., ed., 1994), p906-917.

McNair, Jr., ed., 1994), p906-917.
Incipient Hydraulic Jump at Channel Junctions, George C.
Christodoulou, HY Mar. 93, p409-421.
Intelligent Decision Support System for Stage Discharge
Analysis, Slobodan P. Simonovic, (Water Policy and
Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p283-286. Light at the End of the Chunnel, Virginia Fairweather, WP

Special issue 94, p10-13.

Navigation Channel Design Using Real-Time Marine Simulator, Dennis W. Webb, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1081-1090. Potential-Flow Solution to 2D Transition from Mild to

Steep Slope, J. S. Montes, HY May 94, p601-621. Recent Improvement of Gao Qiao New Channel on Huang-pu River, Guoxian Zhu, WW July/Aug. 94, p368-381. Revised Hydraulic Design of the Rio Hondo Flood Control

Channel, Scott E. Stonestreet, Michael E. Mulvihill and John E. Hite, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p401-

Safety Grates in Supercritical Channels, Julia E. Allred-

Coonrod, IR Jan. Feb. 94, p.218-224.
Site Selection for Beneficial Uses Of Dredged Material in Galveston Bay, Texas, USA, Russell Swafford and Richard F. Gorini, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p399-409.

Stratified Cooling Channel for Thermal Discharges, R. E.

Baddour, EE Jan./Feb. 94, p.242-253. Study for Deepening of the Martin Garcia Channels at Rio de la Plata, Uruguay, D. W. Yang and J. Bonasia, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p.1091-

Velocity Distribution in Compound Channel Flows by Numerical Modeling, Giuseppe Pezzinga, HY Oct. 94, p1176-1198.

Wave Interaction with Fluid Mud in Rectangular Trench, Francis C. K. Ting, WW Mar./Apr. 94, p154-178. Wave Propagation in Ice-Covered Channels, Steven F. Daly, HY Aug. 93, p895-910.

Density-dependent Circulation in Desert-basin Aquifers with Isotropic Self-Similar Permeability Distributions, Gilberto E. Urroz and Daoqiong Yang, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p87-91.

Is Bedform Development Chaotic? César Mendoza Cabrales, (Hydraulic Engineering '94, George Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p78-81. Slender Rigid Block Motion, S. J. Hogan, EM Jan. 94,

p11-24.

Strange Attractors and Chaos in Wastewater Flow, Donald I. Angelbeck and Rafic Y. Minkara, EE Jan./Feb. 94, p122-137.

Characteristics

Advanced Coal Conversion Solid Wastes: Waste-Management Implications, Charles J. Moretti, EY Apr.

Advances in the Characterization of Cement Clinker, Hiroshi Uchikawa and Shunsuke Hanehara, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p231-313.

Characteristics of the US Highway Bridge Population, Kenneth F. Dunker and Basile G. Rabbat, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1006-1013.

Equivalent Differential Equations in Fixed-Grid Characteristics Method, Mohamed S. Ghidaoui and Bryan W. Kar-

ney, HY Oct. 94, p1159-1175.

Geostatistics for Fracture Characterization, R. Mohan Srivastava and Bruce M. Davis, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2131-2138.

Identification and Characterization of Collapsible Gravels, Kyle M. Rollins, Ralph L. Rollins, Trevor D. Smith and George H. Beckwith, GT Mar. 94, p528-542.

Improved Thermal Source Term Generation Capability for Use in Performance Assessment and System Studies, John King and Carol Rhodes, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p627-633.

Model for Constructability Approach Selection, John G. Gugel and Jeffrey S. Russell, CO Sept. 94, p509-521.

Physical-Based Numerical Model of Inclined Starting

Plumes, Juichiro Akiyama, Masaru Ura and Wei Wang, HY Oct. 94, p1139-1158.

Vertical Uplift Capacity of Horizontal Anchors, Kanaka-pura S. Subba Rao and Jyant Kumar, GT July 94, p1134-1147.

Chemical additives

Thermal Conductivity of Earth Blocks, Joe O. Akin-musuru, MT Aug. 94, p341-351.

Chemical equilibrium

Coupled Mass-Transport and Chemical-Equilibrium Modelling of Bronze Disease, M. B. McNeil and J. C. Walton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1014-1019.

Chemical oxygen demand

Continuous Treatment of Textile Water by Ozonation and Coagulation, Sheng H. Lin and Wen Y. Liu, EE Mar./ Apr. 94, p437-446.

Field Test of Stormwater Best Management Practices, S. L. Yu, S. L. Barnes, R. J. Kaighn, Jr. and S. L. Liao, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p508-515.

Chemical reactions

Advanced Concepts in Cement Solidification and Stabilization Technology, D. L. Cocke, M. Y. A. Mollah, T. R. Hess and R. K. Vempati, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p614-615.

Characteristics of Silica-Fume Concrete, Safwan A. Khedr and Mohamed N. Abou Zaid, MT Aug. 94, p357-375.

DOE Lab Develops System to Sack Sodium Nitrate, ET Apr./May 94, p10.

Effect of Fly Ash and Silica Fume on Alkali Silica Reactions, Mette Geiker and Niels Thaulow, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p123-136.

Fly Ash and Alkali-Aggregate Reaction, Michael Thomas, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994),

Integration of Multiple Advanced Analytical Techniques to Study Alkali Silica Reactivity in Concrete Railroad Ties, R. J. Lee, A. J. Schwoeble, K. E. Wagner and J. Yuan, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p217-229.

Kinetics of Monochloramine Reactions with Nitrate, Oliver J. Hao, Chung M. Chien and Richard L. Valentine, EE

July/Aug. 94, p859-874.

Kinetics of SO2-Dolomite Reaction: Application of Random Pore Model, Sanjeev S. Tambe, Srinivas S. Yerrapragada and K. L. Gauri, MT Feb. 94, p65-77.

Mineral Admixtures: Reactions, Micro-Structure and Macro-Properties, Jan Bijen and Hans Pietersen, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p292-328.

Modeling of Chemical Inhibition of Nitrification, Robert W. Okey and H. David Stensel, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and

Mare Edwards, ed., 1994), p297-304.

Practical Importance of Structural Features of Clinker Phases, A. I. Boikova, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p616-617.

Safety Assessment of a Chemical Reactor Vessel, A. Wiedermann, A. Longinow and F. Calabrese, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p1-6.

Selected Properties of High Performance Concrete, Erik J. Sellevold, Harald Justnes, Sverre Smeplass and Einar Aasved Hansen, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p562-609.

TEM Studies of Carbonation and ASR, G. W. Groves, (Cement Manufacture and Use, Paul W. Brown, ed., 1994),

p211-216.

Chemical resistant materials

Long Term Performance of Fiber Reinforced Cements and Concretes, Arnon Bentur, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p223-234.

Chemical spills

An Integrated Shell (ROSS3) for Transport Modeling, Visualization, and Data Management, Keerthisiri S. Angammana, Poojitha D. Yapa and Hung Tao Shen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p150-154.

Chemical treatment

Capping Contaminated Sediments - The Theoretical Basis and Laboratory Experimental Evidence for Chemical Containment, L. J. Thibodeaux, K. T. Valsaraj and D. D. Reible, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1001-1007.

Chemical Cleaning Process for Water Pipe Systems, Craig Edstrand, Allen Hieatt and Jerome Ludwig, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H.

Wegener, ed., 1994), p288-295.

Comparison of Biological and Chemical/Physical Iron Removal, Charlotte D. Smith and James F. Smith, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p74-81.

Impact of System Chemistry on Electroosmosis in Contam-inated Soil, Gerald R. Eykholk and David E. Daniel, GT May 94, p797-815.

Automation Concepts for In-Situ Waste Containment, Lar-ry Banta and David Martinelli, (Robotics for Challengg Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p448-456.

Cement Plant CKD Recovery System, S. M. Cohen and M. E. Prokesch, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p612.

Cementing Action in Non-Portland Cement Systems: Sulpho-Pozzolanic and Silico-Pozzolanic Reactivity, R. T. Hemmings and E. E. Berry, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p329-336.

77

Advances in Chemical Admixtures for Concrete, Mario Collepardi, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p257-291.

Bromide Transport under Sprinkler and Ponded Irrigation, M. Hamdi, D. Durnford and J. Loftis, IR Nov./Dec. 94,

p1086-1097.

Comparison of Propulsion Systems for Space Exploration, Ryan D. Hoover, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p751-755.

Deicing Denver, David S. Backer, Don Smith and Craig E.

Habben, CE July 94, p56-59.

Does Current Cancer "Risk Assessment" Harm Health? Bruce N. Ames, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p121-122.

Evaluation of Corroded Steel Chimneys, Tadeusz Nawrot and Andrzej S. Nowak, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p349-354.

Fiber Optic Chemical Sensors on Mars, M. A. Butler, A. J. Ricco, F. J. Grunthaner and A. L. Lane, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1345-1354

Mineral Admixtures for Concrete - An Overview of Recent Developments, P. K. Mehta, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p243-256.

Mineral Admixtures in Cements for General Use and Special Purposes, Harold Roper, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L.

Sarkar, ed., 1994), p236-242.

Practical Importance of Structural Features of Clinker Phases, A. I. Boikova, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p616-617.

Properties of Soundless Chemical Demolition Agents, Jimmie Hinze and James Brown, CO Dec. 94, p816-827.

Propulsion Systems for Future Space Exploration, Michael B. Delclos, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p765-768.

Transfer Vehicle Sizing for Missions to Mars, James P. Masciarelli, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1355-1364.

Wind Forces on Industrial Facilities, Joseph A. Bohinsky and Hikmat E. Zerbe, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1036-1041.

Chesapeake Bay

Application of Studies on the Overboard Placement of Dredged Sediments to the Management of Disposal Sites, William Panageotou and Jeffrey Halka, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p349-358.

Assessing the Fate of Dredged Sediments Placed in Open-Water Sites, Northern Chesapeake Bay, Jeffrey Halka, William Panageotou, Lawrence Sanford and Shenn Yu-Chou, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1162-1171.

Environmental Restoration and Enhancement using Dredged Material in Chesapeake Bay, Maryland, S. D. Garbarino, R. N. Blama, M. C. Landin, S. R. Maynord and T. R. Patin, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p384-393.

Poplar Island Reclamation and Beneficial Uses of Dredged Material, Edward T. Fulford, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1406-1415.

Chicago

Celebrating Engineers Week, Chicago-Style, CE May 94,

Chicago's Waterfalls, Rita Robison, CE July 94, p36-39.
Columnless in Chicago, Daniel A. Cuoco, Udom Hungspruke and Robert P. DeScenza, CE Nov. 94, p42-

Interceptor Inspection and Rehabilitation Program, William A. Macaitis and Amreek Paintal, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques,

ASCE, 1994), p123-142. Local Sewer Rehabilitation - Metro Chicago, William A. Macaitis and Robert Kuhl, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p111-122.

Sealant Coats Building During Windy City Winter, CE

Feb. 94, p77.

SEPA's Super Water-Treatment Project Takes Top ASCE Prize for 1994, NE May 94, pl. Start-ups, CE Dec. 94, p8.

Aesthetic Considerations in the Design of a Stack Extension, Howard I. Epstein and George Torello, Jr., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1238-1243.

Blast Demolition of Reinforced Concrete Industrial Chimneys, Friedhelm Stangenberg, (Spatial, Lattice and Ten-sion Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p290-299. Evaluation of Corroded Steel Chimneys, Tadeuzz Nawrot

and Andrzej S. Nowak, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p349-354.

Failure of the Turkey Point Unit 1 Reinforced Concrete Chimney During Hurricane Andrew, W. F. Brannen, T. D. Joseph, Randolph W. Snook and Robert A. Porthouse, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p405-414.

China, People's Republic of For O'Neil's Firm, China Trip Could Be the Start of Something Big, NE Oct. 94, p15

More on Mexico, Vietnam, WP Spring 94, p4.

Recent Improvement of Gao Qiao New Channel on Huang-pu River, Guoxian Zhu, WW July/Aug. 94, p368-381. Start-ups, CE July 94, p8.

Startups, CE July 34, pc.
Structural Failure and Quality Assurance of Space Frames,
Tien T. Lan, (Spatial, Lattice and Tension Structures,
John F. Abel, ed., John W. Leonard, ed. and Celina U.
Penalba, ed., 1994), p123-132.

Chloride Diffusivity Computation for Cement Paste, E. J. Garboczi and D. P. Bentz, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p159-173.

Chloride Extraction and Re-Alkalization of Reinforced Concrete Stops Steel Corrosion, Emmanuel E. Velivasakis, Sten K. Henriksen and Richard Hauer, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1127-1134.

Flow and Chloride Transport in the Tidal Hudson River, NY, Lawrence A. Weiss, Raymond W. Schaffranek and M. Peter de Vries, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

p1300-1305.

Macrocell Corrosion of Bent Epoxy-Coated Bars, Khaled Kahhaleh, James Jirsa, Ramon Carrasquillo and Harovel Wheat, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p8-15.

Middle Eastern Concrete Deterioration: Unusual Case History, Jerome P. O'Connor, CF Aug. 94, p201-212.

Recovery of Chromium from Spent Plating Solutions by a Chromyl Chloride Process, Subbarao L. Guddati, Thomas M. Holsen and J. Robert Selman, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p241-248.

Chlorination

Control of Disinfection By-Products in Drinking Water, Philip C. Singer, EE July/Aug. 94, p727-744.

Measurement and Automatic Control of Chlorination, Robert Hill and James Martin, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p718-725.

Modeling Chlorine Residuals in Drinking-Water Distribution Systems, Lewis A. Rossman, Robert M. Clark and Walter M. Grayman, EE July/Aug. 94, p803-820.

Pretreatment of Secondary Effluent for Drip Irrigation, Massoud A. Tajrishy, David J. Hills and George Tchobanoglous, IR July/Aug. 94, p716-731.

Biofilm Sorption of Natural Organic Material, Gary Carlson and JoAnn Silverstein, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p460-466.

Kinetics of Monochloramine Reactions with Nitrate, Oliver J. Hao, Chung M. Chien and Richard L. Valentine, EE

July/Aug. 94, p859-874.

Measurement and Automatic Control of Chlorination, Robert Hill and James Martin, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p718-725.

Measuring and Modeling Chlorine Propagation in Water Distribution Systems, Robert M. Clark, Walter M. Grayman, James A. Goodrich, Rolf A. Deininger and Ken-

neth Skov, WR Nov./Dec. 94, p871-887.

Treatment of Tetrachloroethylene with Anaerobic Attached Film Process, K. H. Chu and W. J. Jewell, EE Jan./Feb. 94, p58-71.

Chromatographic analysis

Use of Gel-Permeation Chromatography in Predicting Properties of Asphalt, Norman W. Garrick, MT Aug. 94, p376-389.

Biological Reduction of Chromium by E. COLI, Hai Shen and Yi-Tin Wang, EE May/June 94, p560-572.

Recovery of Chromium from Spent Plating Solutions by a Chromyl Chloride Process, Subbarao L. Guddati, Thomas M. Holsen and J. Robert Selman, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p241-248.

Removal Of Chromium From Groundwater Using Permeable Barriers: An Aquifer Simulation Study, Mark D. Schmidt and Stephen P. Shelton, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p792-804.

Circulation

Modelling with Nearcir Code, F. Collado, A. Sánchez-Arcilla, M. G. Coussirat and J. Prieto, (*Coastal Dynamics* '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p556-570.

Ambrose, R. B. T. S. Wu and S. C. McCutcheon, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph

R. Rumer, ed., 1994), p890-894.

Characterization of Circulation and Salinity Change in Galveston Bay, Keh-Han Wang, EM Mar. 94, p557-579. Circulation and Flushing in Casco Bay, Maine, Bin Gong

and Bryan R. Pearce, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1039-1046.

- Coastal Circulation and Sedimentation During Severe Storms, Timothy R. Keen, Scott M. Glenn and Rudy L. Slingerland, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p279-293.
- A Comparative Analysis of Estuarine Circulation Simula-Comparative Analysis of Estuarine Circulation Simula-tion Using Laterally Averaged and Vertically Averaged Hydrodynamic Models, C. Kirk Ziegler, Jerad D. Bales, Jeanne C. Robbins and Alan F. Blumberg, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p447-460.

- Comparison of 2D and 3D Models for Computing Shallow Water Tides in a Friction-Dominated Tidel Embayment, R. R. Grenier, R. A. Luettich, Jr. and J. J. Westerink, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p58-7.
- Daily Procedure for GLFS Nowcasts, Chieh-Cheng J. Yen, John G. W. Kelley and Keith W. Bedford, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p.202-206.
- Density-dependent Circulation in Desert-basin Aquifers with Isotropic Self-Similar Permeability Distributions, Gilberto E. Urroz and Daoqiong Yang, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p87-91
- Development and Application of a Three-Dimensional Boundary-Fitted Circulation Model in Providence River, Muslim Muin and Malcolm Spaulding, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p432–446.
- Diffusion Hydrodynamic Model of Shallow Estuary, G. L. Guymon, M. N. Khan, M. Collins and T. V. Hromadka, WR Mar./Apr. 94, p253-266.
- A Field and Modeling Study of Residual Circulation in Sarasota Bay and Tampa Bay, Florida, Y. P. Sheng and S. J. Peene, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p641-655.
- The Great Lakes Forecasting System: An Overview, Keith W. Bedford and David J. Schwab, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p197-201.
- Influence of Sikes Cut on Apalachicola Bay, FL; A Preliminary Analysis from a Three-Dimensional Perspective, William K. Jones, Boris Galperin, Robert H. Weisberg and T. S. Wu, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p351-365.
- Modeling Circulation and Salinity Transport in the Indian River Lagoon, M. Z. Moustafa and J. M. Hamrick, (*Estu*arine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p381-395.
- Modeling the Seasonal Circulation in Massachusetts Bay, Richard P. Signell, Harry L. Jenter and Alan F. Blumberg, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p578-590.
- Near Field Behavior of a Far Field Circulation Model, Xueyong Zhang, Eric Adams, Alan Blumberg, Z. G. Ji and Kirk Ziegler, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p155-159.
- Nowcast System Development for the Straits of Florida, Christopher N. K. Mooers and Dong-Shan Ko, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p158-171.
- Numerical Decomposition of Eulerian Residual Circulation in Long Island Sound, Richard A. Schmalz, Jr., (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p294-308.
- Simulated Circulation and Transport in Adjacent Wind-Driven Estuaries in North Carolina, Jeanne C. Robbins and Jerad D. Bales, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p105-118.
- Simulating Effects of Highway Embankments on Estuarine Circulation, Jonathan K. Lee, Raymond W. Schaffranek and Robert A. Baltzer, WW Mar./Apr. 94, p199-218.

- Simulation of Flushing in Indian River Lagoon Using 1-D and 3-D Models, Y. P. Sheng, H. K. Lee and C. E. Domas, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p366-380.
- Solutions of Primitive Equations for Three-dimensional Tidal Circulation, Vincenzo Casulli and Ralph T. Cheng, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p396-406.
- Three Dimensional Modeling of Circulation and Salinity in Mt. Hope Bay and the Lower Taunton River, Wentul Huang and Malcolm M. Spaulding, (Estuarier and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p500–508.
- A Wind Driven Lake Circulation Finite Element Model for the Upper St. Marys River, E. M. Yuen and J. A. McCorquodale, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p584-588.

Cisterns

- Hydraulic Residence Time of CSTRs under Unsteady-State Condition, Jian Peng, EE Nov./Dec. 94, p1446-1458.
- Spectral Analysis of Fluid Flow in Oscillating Grid Reactor, Leonard W. Casson, Desmond F. Lawler and David G. Bogard, EM Feb. 94, p346-367.

Civil engineering

- 100 Years of Data Not Enough (ltr), CE Aug. 94, p31-32.
- 3-D Coordinates A Universal Rectangular Coordinate System for a GIS and Other Spatial Databases, Earl F. Burkholder, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p.233-240.
- Adaptive Instructor Model for an Engineering ITS, Nelson C. Baker and Chaisak Srisethanil, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1059-1066.
- Admission Requirements for Non-Civil Engineering Graduate Applicants, Richard H. McCuen and Allen P. Davis, El Apr. 93, p163-169.
- The Application of Artificial Neural Networks to Civil Engineering, Ian Flood, Nabil Kartam and Tanit Tongthong, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p668-675.
- Application of Fuzzy Logic in Civil Engineering in Japan, Hitoshi Furuta, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1900-1907.
- ASCE Guide to Employment Conditions for Civil Engineers, revised edition (M&R No. 55), Committee on Employment Conditions, (D. Wayne Klotz, chmn.), 1994, 0-7844-0057-1, 30pp.
- CAD-Based "Intelligent" Drawings: An Automated Quality Control Approach to Land Development, Charles McIntyre, Kevin Parfitt and Matt Syal, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p547-554.
- California Blimp Hangars, Framed in Wood, Are Landmarks, CE Oct. 94, p70.
- CERF Showcases Research Payoff, CE Jan. 94, p18-19. Chile's President Is Named Honorary Fellow of ASCE, NE
- June 94, p5.
 Civil Engineering and Civic Monuments: The Commissioning, Design and Public Perception of Urban Infrastructure Projects, Anthony C. Webster, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,
- 1994), p1244-1249. Civil Engineering Art for Art's Sake, CE Jan. 94, p76.
- Civil Engineering Undergraduate Education in Japan: System Overview, Masanori Tsuji and Antonio Nanni, El Apr. 94, p135-144.
 - Cladding Goes Over Eggs Easy, CE Feb. 94, p77. A Colorific Tale: ASCE Birmingham Branch Contest
 - A Colorific Tale: ASCE Birmingham Branch Contest Reaches Epic Proportions, CE Aug. 94, p65-66.
 - Computer Aided Design in Civil Engineering Based Upon the OODBMS ONTOS, Kartheinz Lehner and Dietrich Hartmann, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1419-1425.

Computer-Assisted Instruction in Civil Engineering, Thomas Froese, Sundar Prasad, Jeff Friesen and Dan Zollman, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1647-1654.

Computer-Based Risk Assessment of Competitive Procurecomputer-Based risk Assessment of Computer Frozent ment, Larry G. Crowley, (Computing in Civil Engineer-ing, Khalil Khozeimeh, ed., 1994), p1540-1547. Computing in Civil Engineering, 2 vols., Khalil Khozeimeh, ed., 1994, 0-7844-0026-1, 2275pp. Concrete Canoes from 20 Schools to Race this Month in

New Orleans in Contest Finals, NE June 94, p15. Congressman Brown Named ASCE Honorary Fellow, NE

Apr. 94, p15.

The Context-Oriented Model: An improved Modeling Approach for Representing and Processing Design Stan dards, Han Kiliccote, James H. Garrett, Jr., Thomas J. Chmielenski and Kent A. Reed, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p145-152. Cost-Schedule Integration for Cash-Flow Forecastin

Ronie Navon, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p1536-1539.

Deductive Databases in Engineering, Sivand Lakmazaheri, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p806-813.

EDI and Its Role in Information Management, G. Edward Gibson, Jr., Lansford C. Bell and Clarisse Molad, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1798-1805.

Engineering R&D Strategy, Harvey M. Bernstein, CE Feb. 94, p44-46.

Enhance Engineering Opportunities-or Else, CE Aug. 94,

Fast Track in the 'SLO' Lane Helps Cal Poly Civil Engineers Triumph as Best ASCE Student Group in the Nation, NE Oct. 94, p9-10.

Formal Specification of AEC Product Models, Harpreet S. Chadha, John W. Baugh, Jr. and Jeannette M. Wing, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p571-578.

A Framework for Collaborative Distributed Facility Engineering, Taha Khedro, Michael R. Genesereth and Paul M. Teicholz, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1489-1496.

Geo-engineering: a Vision for the 21st Century, CERF report #94-5020, Civil Engineering Research Foundation,

1994, 0-7844-0042-3, 48pp.

Go West, Says Salary Survey, CE May 94, p8. A Hypermedia Constructability System, Bob McCullouch and Bob Patty, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1397-1404. Ideal of Civil Engineering, George Bugliarello, El July 94,

p290-294.

p.290-294. Infrastructure and Economic Development: Civil Engineer-ing Perspective, Neil S. Grigg, El Jan. 93, p51-61. Interactive Cost Estimating During Design, Robert I. Carr,

Hyun-Soo Lee and Photios G. Ioannou, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1556-1563.

An International Knowledge Database for Ground Improvement Geo-Systems, C. John Yoon, Theva Thevanagayam and Ilan Juran, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p277-284.

Knowledge Issues in Modeling, Hossam El-Bibany, (Computing in Civil Engineering, Khalil Khozeimeh, ed.,

1994), p579-583.

Machine Learning in Civil Engineering – Important Issues

Machibe Learning in Civil Engineering - important isospand Challenges, Benoît Julien, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p877-884.

Mobile GIS Technologies, John Alexander, Jerry Merckel, Kirk Upthegrove and David Martini, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p. 1423-1439. p1623-1630.

Multicriteria Optimization in Engineering Design, Andrzej Ameljańczyk, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p318-325.

Multimedia in Civil Engineering, Jorge A. Vanegas and Nelson C. Baker, CE May 94, p71-73.

Multimedia Technologies for Civil and Construction Engineering Professional Practice, Jorge A. Vanegas and Gary Smith, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p592-599. National Engineers Week 1994: Celebrates the Future, NE Apr. 94, p7.

National Survey of Materials Engineering Program, K. P. George, John R. Rohde and Srinivasa L. Iyer, El July 94,

Neural Networks in Civil Engineering. I: Principles and Understanding, Ian Flood and Nabil Kartam, CP Apr. 94, p131-148.

Neural Networks in Civil Engineering. II: Systems and Application, Ian Flood and Nabil Kartam, CP Apr. 94,

p149-162

Objects: the CADD/GIS Common Denominator, Paul Scarponcini, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1764-1771. On the Shoulders of Giants, Francis E. Griggs, Jr., El July

94, p254-264.

Pen Computers in Civil Engineering, Don M. Newell, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1631-1638.

Pounds, Kilos and Newtons, Everett L. Boyd, CE Sept. 91,

p72-73.

Representing Design Cases Based on Methods, B. Raphael, B. Kumar and I. A. McLeod, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p255-292.

Seismic Renewal of Civil Infrastructure Systems, M. P. Singh and S. C. Liu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1508-1513. Strategies to Enhance Well-Being of Civil Engineering

Profession, Michel Bruneau, El Oct. 94, p341-359 Strategy for Passing the Civil P.E. Exam, John G. Everett

and James T. Mitroka, El July 93, p269-278.

A Symbol-form Mapping Framework for Conceptual Design Support, S. R. Gorti and D. Sriram, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1591-1598.

TIGER and Census Bureau Data in a GIS: A Powerful Combination for Civil Engineers, Robert W. Marx, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p225-232.

Towards Practical Machine Learning Techniques, Yoram Reich, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p885-892.

Transactional Support for Concurrent Finite Element Anal-ysis & Design, Sanjai Tiwari and H. R. Riggs, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p798-805. Use of Database in Geo-environmental Engineering, Amin

Rahman and Thomas J. Moynahan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1251-

A 'Grab' Bag of Information on Rebar, CE Dec. 94, p8.

Civil engineers

ASCE 1993 Salary Survey, ASCE Committee on Employment Conditions of the Professional Practice Division, El Apr. 94, p221-230.

ASCE Salary Survey 1993, Committee on Employment Conditions of the Professional Practice Division of the American Society of Civil Engineers, (D. Wayne Klotz, chmn.), 1994, 0-87262-893-0, 66pp.

Conflict Between Professionalism and Political Responsiveness, Robert W. Brannan, El Jan. 94, p36-40.

Contemporary Model of Civil Engineering Failures, Richard L. Meehan, Brian Chun, Sang-wuk Ji, Stephanie King, Knut Ronold and Frank Yang, EI Apr. 93, p138-146.

Engineers Should Learn to Use System to Gain Respect and Money (ltr), CE Sept. 94, p32-33.

Engineers' Salaries: It's Not What You Do, but where You Do It that Counts, NE Apr. 94, p15.

Facilitating Sustainable Development: Is Our Approach Correct? Michael N. T. Cottell, El July 93, p220-224.

The Importance of Being Historical: Civil Engineers and Their History, Jane Morley, El Oct. 94, p419-428. In News from All Over, Civil Engineers Continue to Shine,

NE Apr. 94, p14.

Innovative Introduction to Civil Engineering Curriculum, E. F. Glynn and W. B. Fergusson, El Apr. 94, p149-157. NASA's Mission to Planet Earth: Will Civil Engineering Reap Benefits? John H. McElroy, EI Oct. 94, p401-404.

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Qualification System for Building Engineers in Korea, Li-Hyung Lee and Waon-Ho Yi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p215-220.

Cladding

Critique - Manufactured Housing Session, Frank Walter, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p203-212.

Diaphragm Action of Cladding in Low-Rise Metal Build-ings, Bala Sockalingam, David Montgomery, Scott

Schiff and Peter Sparks, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1048-1053. Hurricane Andrew - The Ultimate Curtain Wall Test, James Hayes Larkin, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p424-429.

Improving the Performance of Architectrual Glazing in Hurricanes, Joseph E. Minor and Richard A. Behr, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani,

ed., 1994), p476-485.

Long-Term Effects of Neutron Absorber and Fuel Matrix Corrosion on Criticality, William G. Culbreth and Paige R. Zielinski, (High Level Radioactive Waste Manage-ment, High Level Radioactive Waste Program Committee, 1994), p634-641.

Material Condition of Underwater Fuel and Storage Equip-

ment, A. P. Hoskins, J. G. Scott, C. V. Shelton-Davis and G. E. McDannel, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Com-

mittee, 1994), p1117-1123.

Nonlinear Dynamic Response of an RC Structure with Advanced Cladding, Loai F. El-Gazairly, Barry J. Goodno vanced Cladunig, Loai F. Ez-Gazaniy, Sahir J. Goodin and James I. Craig, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1262-1267. Prediction of Cladding Life in Waste Package Environ-ments, J. Kevin McCoy and Thomas W. Doering, (High

Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p565-572.

Preliminary Spent LWR Fuel Oxidation Source Term Model, R. E. Einziger, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p554-559.

Spent Fuel Characteristics Relevant to High-Level Waste (HLW) Source Term, Hersh K. Manaktala, Prasad K. Nair and Charles G. Interrante, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p560-564.

Claims

Computer Use in Claims Analysis -- Roundtable Discussion, John R. Knoke, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2136-2139.

Construction Claims and Disputes: Causes and Cost/Time Overruns, Cheryl Semple, Francis T. Hartman and George Jergeas, CO Dec. 94, p785-795.

Contemporaneous Development of Field Data: Transportation Construction Claim Defense, Kenneth H. Dunne

and George Navarrete, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2124-2135. Contractors' Construction-Claims Avoidance, George F. Jergeas and Francis T. Hartman, CO Sept. 94, p553-560.

Facilitate Delay Claim Analysis with As-Built Schedule Databases, John R. Knoke and Gary H. Jentzen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2104-2111.

Final Payment Frees Contractor From Sub's Claims, CE Aug. 94, p24.

Five Steps to Resolving Construction Disputes-Without Litigation, Richard H. Steen, ME July/Aug. 94, p19-23. Hypertext and Claim Analysis, Geoffrey Bubbers and John

Christian, CO Dec. 92, p716-730.

Integrated System for Managing Owner-Directed Project Acceleration, Nagui I. Riad, David Arditi and Jamshid Mohammadi, CO Mar. 94, p77-95.

Interpretation of Construction Contracts, H. Randolph Thomas, Gary R. Smith and Robert E. Mellott, CO June 94, p321-336.

More Than an Underground Success, James Denning, CE Dec. 93, p42-45.

Predicting Construction Contract Surety Bond Claims Using Contractor Financial Data, Gordon D. Severson, Jeffrey S. Russell and Edward J. Jaselskis, CO June 94, p405-420.

State DOTs Tackle Problem Projects, CE Mar. 94, p18-19. Using Pen Computers in Post-Disaster Insurance Claim Settlements, Raja R. A. Issa, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2145-2148.

Allowable Design Loads for Marman Clamp Systems, Robert DiTolla and Michael Ernst, (Engineering, Con-struction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p217-226.

Development of a Partial Gravity Lunar Airlock, David John Gutierrez, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p227-236.

A New Airlock Approach for Human Exploration, Stephen Capps, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p206-216.

Application of Numerical Models in the Design of Clarifiers, J. A. McCorquodale and S. P. Zhou, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p186-193.

Clarifier Enhancements Yield Excellent Performance, Cindy L. Wallis-Lage and David B. Hunt, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p194-201.

Effects of Gravity Currents in Circular Secondary Clarifiers, C. van Marle and C. Kranenburg, EE July/

Aug. 94, p943-960.

Evaluating Activated Sludge Secondary Clarifier Performance: A Protocol, E. J. Wahlberg, M. Augustus, D. T. Chapman, C. Chen, J. K. Esler, T. M. Keinath, D. S. Parker, R. J. Tekippe and T. E. Wilson, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p209-216.

Numerical Approach to Clarifier Operation According to Flux Theory, Bruce J. Alderman, Thomas L. Theis and Anthony G. Collins, EE May/June 94, p670-676.

Optimizing Secondary Clarifier Performance: A Presenta-tion Outline, John K. Esler, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p202-208.

Short Circuiting and Density Interface in Primary Clarifiers, Siping Zhou, J. A. McCorquodale and A. M.

Godo, HY Sept. 94, p1060-1080.

Simulation of Flow in Circular Clarifiers with and without Swirl, László Szalai, Peter Krebs and Wolfgang Rodi, HY Jan. 94, p4-21.

Sludge Hopper Design for Activated Sludge Clarifiers, O. E. Albertson, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p217-224.

Classification

Classification of Semi-Rigid Connections Based on the Elastic-Plastic Mechanical Behavior of Frames, Yoshiaki Goto, Satoshi Miyashita and Wai-Fah Chen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1191-1196.

Criteria for Evaluating Flow Classes in Alluvial Channels, Prabhata K. Swamee and Chandra Shekhar P. Ojha, HY

May 94, p652-658.

Evaluation and Control of Collapsible Soils, Adnan A. Basma and Erdil R. Tuncer, GT Oct. 92, p1491-1504.

Instream Flow Studies: Susquehanna Basin and Pennsylvania, Donald R. Jackson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p145-148.

Standards Processing 2000, Dana J. Vanier, J. Russell Thomas and Jamie L. Worling, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p137-144.

A Suggested International Classification of Marinas, Jon Guerry Taylor, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p140-143.

Clay liners

Compacted Clay Liners and Covers for Arid Sites, David E. Daniel and Yung-Kwang Wu, GT Feb. 93, p223-237.

Design of Clay Liner Permeability at Laboratory Scale Using Expert Systems, Imad A. Basheer, Wissam A. Naouss and Lakshmi N. Reddi, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p273-276.

Estimating Clay Liner and Cover Permeability Using Computational Neural Networks, Girish Agrawal, Saroj Weeraratne and Kris Khilnani, (Computing in Civil En-gineering, Khalil Khozeimeh, ed., 1994), p115-122.

Estimating Hydraulic Conductivity of Compacted Clay Liners, Craig H. Benson, Huaming Zhai and Xiaodong Wang, GT Feb. 94, p366-387.

Hydraulic Conductivity of Compacted Clay Frozen and Thawed in Situ, Craig H. Benson and Majdi A. Othman, GT Feb. 93, p276-294.

Minimum Thickness of Compacted Soil Liners: I. Stochastic Models, Craig H. Benson and David E. Daniel, GT Jan. 94, p129-152.

Minimum Thickness of Compacted Soil Liners: II. Analy sis and Case Histories, Craig H. Benson and David E. Daniel, GT Jan. 94, p153-172.

Statistical Sample Size for Construction of Soil Liners, Craig H. Benson, Huaming Zhai and Salwa M. Rashad, GT Oct. 94, p1704-1724.

Under Cover, Neno Duplancic, CE Dec. 94, p70-71.

Clay soils

Air-Permeability Measurement for Soil at Low and High Pressure, Shawn A. Rodeck, Bruce A. DeVantier and Braja M. Das, EE Sept./Oct. 94, p1337-1343.

Comparison of Rock Correction Methods for Compaction of Clayey Soils, Sandra L. Houston and Kenneth D.

Walsh, GT Apr. 93, p763-778.

Compressibility of Clays: Fundamental and Practical Aspects, Serge Leroueil, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p57-76.

Crack Depths in Drying Clays Using Fracture Mechanics, Peter H. Morris, James Graham and David J. Williams, (Fracture Mechanics Applied to Geotechnical Engineer-Vallejo, ed. and Robert Y. Liang, ed., ing, Luis E. 1994), p40-53.

Factors Affecting Degradation of Clay Masses, Paul A. Gilbert, (Dredging '94, E. Clark McNair, Jr., ed., 1994),

p449-457.

The Influence of Fines Type and Content on Cyclic Strength, Joseph Patrick Koester, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p17-33.

Mat Foundation Design: An Historical Perspective, Edward J. Ulrich, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed.

and Guy Y. Félio, ed., 1994), p107-120. Methods to Reduce the Settlement of Embankments on

Soft Clay: A Review, Jean-Pierre Magnan, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p77-91.

Penetration Resistance Value along Compaction Curves, Alain G. Faure and José D. Viana Da Mata, GT Jan. 94,

Performance of Gunite Brow Ditches, Robert W. Day, IR

Settlement of Embankments on Soft Clays, Gholamreza Mesri, Dominic O. Kwan Lo and Tao-Wei Feng, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p8-56.

Settlement of Tanks on Clay, J. Michael Duncan, Timothy B. D'Orazio and Phil Myers, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p92-106.

Swell-Shrink Behavior of Compacted Clay, Robert W. Day, GT Mar. 94, p618-623.

Sept./Oct. 94, p957-963.

Vibratory Extraction of Clay Fines from Subsurface, Lakshmi N. Reddi, A. Hadim, R. N. Prabhushankar and F. Shah, EE Nov./Dec. 94, p1544-1558.

Clays

Analysis of Earthquake Fault Rupture Propagation through Cohesive Soil, Jonathan D. Bray, Raymond B. Seed and H. Bolton Seed, GT Mar. 94, p562-580.

Analysis of the Juturnaiba Embankment Dam Built on an Organic Soft Clay, Roberto Q. Coutinho, Márcio S. S. Almeida and Jose Bernardino Borges, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p348-363.

Anisotropy Studies on Cuboidal Shear Device, N. Sivakugan, J-L. Chameau and R. D. Holtz, GT June 93,

p973-983.

Application of Fracture Mechanics to Soils: An Overview, Luis E. Vallejo, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert

Y. Liang, ed., 1994), p1-20.

A Case History of Settlement of an Embankment on Lagoonal Deposits Influenced by Artesian Conditions, An-Bin Huang and Bob Y. K. Wong, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p426-435.

Case Studies: Clay Cover Cracking Analysis Using FEM Techniques, Robert Y. Liang, John C. Lommler, Suck-hong Lee and Bob Meyers, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p86-101.

Clay Plugs Seal Liner Leaks, ET June/July 94, p1,4.

Coal Ash and Dredged Material in Reef Construction, William B. Baker, Jr. and Richard F. Gorini, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p664-672.

Collapse Mechanism of Compacted Clayey and Silty Sands, T. A. Alwail, C. L. Ho and R. J. Fragaszy, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1435-1446.

Consolidation Characteristics of an Offshore Clay Deposit, J. A. R. Ortigao and A. S. F. J. Sayao, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1415-1424.

Consolidation of Clay Layer: Hydrogeologic Boundary Conditions, Robert L. Schiffman, John M. McArthur and Robert E. Gibson, GT June 94, p1089-1093.

Consolidation Settlements and Pore Pressure Dissipation, Demetrious C. Koutsoftas and Raymond K. H. Cheung, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1100-1110.

Discrete-Element Method for Simulating Behavior of Co-hesive Soil, A. Anandarajah, GT Sept. 94, p1593-1613.

Displacement of Batter Piles in Layered Soil, A. S. Yalcin and G. G. Meyerhof, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p975-985.

Drained Residual Strength of Cohesive Soils, Timothy D. Stark and Hisham T. Eid, GT May 94, p856-871.

Dynamics of Coagulation of Clay Particles with Aluminum Sulfate, Hsiao-Wei Ching, Menachem Elimelech and Janet G. Hering, EE Jan./Feb. 94, p169-189.

Effect of Gravel on Hydraulic Conductivity of Compacted Soil Liners, Thomas L. Shelley and David E. Daniel, GT Jan. 93, p54-68.

Effect of Heat Treatment on Strength of Clays, R. C. Joshi, Goral Achari, D. Horsfield and T. S. Nagaraj, GT June 94, p1080-1088.

Effect of Nonuniform Stresses on Measured DSS Stress-Strain Behavior, Don J. DeGroot, John T. Germaine and Charles C. Ladd, GT May 94, p892-912.

Equivalent Diameter of Vertical Drains With an Oblong Cross Section, Richard P. Long and Alvaro Covo, GT Sept. 94, p1625-1630.

Flocculation Kinetics Using Fe(III) Coagulant to Coagulate Kaolin Clay in Water: Effects of Temperature, Lim-Seok Kang and John L. Cleasby, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p162-169. Fracture Mechanics and Plasticity in Saturated Clay, Adel S. Saada, Liqun Liang and Gary F. Bianchini, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p21-39.

Fracture Mechanics Applied to Geotechnical Engineering, Geotechnical Special Publication No. 43, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994, 0-7844-0056-3, 165pp.

Fracture Toughness of Compacted Cohesive Soils Using Ring Test, Jack A. Harison, Bobby O. Hardin and Kamyar Mahboub, GT May 94, p872-891.

Generalized Creep and Stress Relaxation Model for Clays, Ronaldo I. Borja, GT Nov. 92, p1765-1786.

Harborside International Golf and Marina Facility, Frank L. Kudrna, Jr. and Richard P. Nugent, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p124-131.

The Influence of Engineering Judgement in the Settlement Analysis of a Test Fill Near Châlon-sur-Saône, France, Jean-Pierre Demartinecourt and Jean-Pierre Rajot, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p897-910.

An Investigation of the Reinforcing Effect of Stone Columns in Soft Clay, Doug Stewart and Martin Fahey, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y.

Félio, ed., 1994), p513-524.

Long Term Performance of Raft and Footing Foundations Above Clayey Silt, A. O. Landva, A. J. Valsangkar and Z. Wroblewicz, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p860-874.

Management of Dredged Material Placement Operations, Timothy D. Stark, Iván Contreras and Jack Fowler, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio,

ed., 1994), p1353-1365.

Measurements and Numerical Modelling of High Rise Building Foundations on Frankfurt Clay, Eberhard Franke, Bernd Lutz and Yasser El-Mossallamy, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1325-1336.

Model Prediction of Anisotropic Behavior of Boston Blue Clay, Andrew J. Whittle, Don J. DeGroot, Charles C. Ladd and Tian-Ho Seah, GT Jan. 94, p199-224.

Movement of Colloids Under Hydraulic Gradients, Rao S. Govindaraju and Lakshmi N. Reddi, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p322-326.

Multiaxial Cyclic Plasticity Model for Clays, Ronaldo I. Borja and Alexander P. Amies, GT June 94, p1051-

New Method for Stabilizing Phosphatic Clay by Using Lime Columns, NE July 94, p16.

New Way to Stabilize Clay, ET Aug./Sept. 94, p11.

Nonlinear Three Dimensional Analysis of Downdrag on Pile Groups, Sangseom Jeong and Jean-Louis Briaud, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1366-1384.

Nonlinear Undrained Lateral Response of Rigid Drilled Shafts Using Continuum Theory, Paul W. Mayne, Fred H. Kulhawy and Charles H. Trautmann, (Vertical and Horizontal Deformations of Foundations and Embank-ments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p663-676.

Note on Bearing Capacity of Soft Clays under Embank-ments, H. S. Yu and S. W. Sloan, GT Jan. 94, p246-255.

Numerical Modeling of Bridge Approach Settlement with Foundation-Embankment Interaction, Musharraf Zaman, Dinesh Bhat and Joakim Laguros, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1400-1414.

P-y Analysis of Laterally Loaded Piles in Clay Using DMT, M. A. Gabr, T. Lunne and J. J. Powell, GT May

94, p816-837.

Performance of a Steel Tank Founded on a Marine Clay, H. Senapathy, J. R. Davie and L. W. Young, Jr., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p830-841.

Performance of Three Large-Diameter Oil Tanks on Soft Clay, Mamdouh Hamza, John R. Davie and Michael R. Lewis, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and

Guy Y. Félio, ed., 1994), p923-936.

Preconsolidation versus Aging Behavior of Kaolinite Clay, G. A. Athanasopoulos, GT June 93, p1060-1066.

Rate of Settlement of Silt Alluvium at Trojan, Derek H. Cornforth, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1460-1471. Replacement of a Failed Embankment Designed to Accom-

modate Large Settlement: A Case Study, B. Kent Merritt and Gary M. Wantland, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p364-375.

Saturation and Gas Migration Within Clay Buffers, Peter Grindrod, Michael Impey, Syra Saddique and Hiroyasu Takase, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2069-2075.

Settlement of a Silo Subjected to Cyclic Loading, Marco Favaretti and Alberto Mazzucato, (Vertical and Horizon-tal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p775-

Settlement of an Air Cargo Structure on Soft Clay, Mazen E. Adib and William G. Paratore, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p875-

Settlement of Building Foundations on Clay Soil Caused by Evapotranspiration, Vincent Silvestri and Claudette Tabib, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1494-1504.

Settlement of Deep Compacted Fills in California, Ernesto E. Vicente, Gerald M. Diaz and Allen M. Yourman, Jr., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y.

Félio, ed., 1994), p1124-1134. Settlement of Large Mat on Deep Compressible Soil, James P. Stewart, Hugh S. Lacy and Charles C. Ladd, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p842-859.

Settlement Predictions Using Piezocone, J. R. Davie, H. Senapathy and W. Murphy, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p818-829.

Settlements of Highway Embankments on Soft Lacustrine Deposits, Loren R. Anderson, Casan L. Sampaco, Syed H. Gilani, Edward Keane and Loren Rausher, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p376-397.

Soil-Cover Success, Issa S. Oweis, George Dakes, Thomas Marturano and Richard Wierer, CE Oct. 94, p58-59.

Some Aspects of Determination of Pile Capacity by the Wave Equation, Mark R. Svinkin and Wondem Teferra, (Structures Congress XII, N. C. Baker, ed. and Barry J.

(Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), 9946-951.

Stress-Deformation Behavior of an Embankment on Boston Blue Clay, Charles C. Ladd, Andrew J. Whittle and Dante E. Legaspi, Jr., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p.1730-1759.

Strip Foundation on Geogrid-Reinforced Clay, E. C. Shin, B. M. Das, V. K. Puri and S. C. Yen, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p538-547.

Surficial Stability of Compacted Clay: Case Study, Robert

W. Day, GT Nov. 94, p1980-1990. Swell versus Saturation for Compacted Clay, Robert W. Day, GT Aug. 92, p1272-1278.

T-Bar Penetration Testing in Soft Clay, D. P. Stewart and M. F. Randolph, GT Dec. 94, p2230-2235.

Testing of Hollow Clay Tile Masonry Prisms, W. D. Jones and M. B. Butala, (Structures Congress XII, N. C. Baker, red. and Barry J. Loodno, ed., 1994), p1094-1099.
Tests for Flow along Vertically Stratified Porous-Media Interfaces, Ronald B. Manila, Jr. and J. Jeffrey Peirce, EE May/June 94, p527-542.

Tree Root Induced Settlement of a Large Industrial Build-ing Founded on Expansive Clay-A Case History, Aziz Aboaziza and Hisham H. H. Mahmoud, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1472-1481.

Turbulent Structure of Water and Clay Suspensions with Bed Load, Zhaovin Wang and Peter Larsen, HY May 94,

p577-600.

Ultimate Settlement by Hyperbolic Plot for Clays with Vertical Drains, Siew-Ann Tan, GT May 93, p950-956.

Uniform Lateral Load Capacity of Infilled Frames, Roger D. Flanagan and Richard M. Bennett, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p785-790.

Uplift Capacity of Small-Diameter Drilled Shafts from In Situ Tests, Alan J. Lutenegger and Gerald A. Miller, GT Aug. 94, p1362-1380.

Clean Water Act

Clean Water Act Reauthorization: The States' Perspective, Roberta Haley Savage, (National Water Resources Regulation: Where is the Environmental Pendulum Now?,

Manon: Ware is the Environmental Fenalulin Now?, Howard Holme, ed., 1994), p34-52.
Coping with EPA's Transportation Storm Water Permit, James P. Amick, (Hydraulic Engineering '94', George V.
Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1219-

Federal Permits for Marina Development: Controlling the Process, Johnine J. Brown, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p144-153.

Improvements to the Clean Water Act and Related Statutes, Howard Holme, (National Water Resources Regulation: Where is the Environmental Pendulum Now?. Howard Holme, ed., 1994), p233-257.

Laws and Regulations Regarding Wetland Mitigation and Mitigation Banking, John D. Rogner, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and

Fred A. Klancnik, ed., 1994), p333-341.

A Wetland Mitigation Bank - An Economic Model, Douglas L. Lashley, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p352-359.

Wetland Mitigation Banks -- A Win-Win Situation, Robert D. Sokolove and P. Robert Thompson, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p342-351.

Client relationships

Critical Analysis of Time and Cost of Management and Traditional Contracts, Shamil G. Naoum, CO Dec. 94, p687-705.

Escaping the Niche, Shawn R. T. Severn and Corinne G. Severn, CE Oct. 94, p67-68.

Is it Necessary to Compromise Engineering Ethics to Remain Competitive? Jim V. Anderson, El Oct. 94, p379-383

Making the Most of Marketing, William F. Peck, ME Nov./Dec. 94, p17-21.

An Object Oriented Highway Information System in the Client-Server Environment, Kelvin C. P. Wang and John P. Zaniewski, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1959-1966.

Organizational Attitudes of Senior Professionals, George Bennett and John Whittaker, ME May/June 94, p35-40. Seminars: A Tool for Marketing Professional Services, Scott C. Gladden, Karen S. Nakhjiri and Shawn R. T. Severn, ME Jan./Feb. 94, p14-18.

Climatic changes

Adaptive Forecasting of Hourly Municipal Water Con-sumption, Chatree Homwongs, Tep Sastri and Joseph W. Foster, III, WR Nov./Dec. 94, p888-905.

Atmospheric Circulation and Snowpack in the Gunnison River Basin, Gregory J. McCabe, Jr., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p481-484.

The Case for Southern Nevada's Thirst, G. C. K. Grinnell, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994). p319-322.

Climate Change, Jim Lambert, (), p352-354.

Climate Change Impacts on Boston's Water Supply, Paul H. Kirshen and Neil M. Fennessey, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p489-492.

Climate Warmi limate Warming and Great Lakes Management, Benjamin F. Hobbs, Philip T. Chao, Mohammed Nayal and William T. Bogart, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p295-316.

Climatic Perspective on the 1993 Mississippi R. Flood, Kenneth E. Kunkel, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

p600-602.

Coastal Eutrophication and Temperature Jacques Ganoulis, Stilianos Rafailidis, Istvan Bogardi, Lucien Duckstein and Istvan Matyasovszky, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p317-330.

Effects of Climate Change on Water Quality, G. K. Meyer and G. T. Orlob, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N.

Tuvel, ed., 1994), p275-278.

Effects of Global Warming on Hurricane-Induced Flooding, William J. Gutowski, George F. McMahon, Shing S. Schluchter and Paul H. Kirshen, WR Mar/Apr. 94,

The Effects of Spatial Resolution in Modeling the North Fork Drainage of the Gunnison River Basin, Leslie Frankoski, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p29-32.

ed., 1994), p.29-32.

Evaporation and Evaportranspiration under Climate Change in New England, Neil M. Fennessey and Paul H. Kirshen, WR Jan/Feb. 94, p48-69.

Global-Climate Change?, ET Aug/Sept. 94, p11.

Late Glacial Climate Estimates for Southern Nevada the Changes of Social Power Review A Microstree Additional Control of Social Power A

Ostrocode Fossil Record, Richard M. Forester and Alison J. Smith, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2553-2561.

Late Glacial to Modern Climate Near Yucca Mountain Nevada, Richard M. Forester, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p2750-2754.

Molluscs as Climate Indicators: Preliminary Stable Isotope and Community Analysis, Saxon E. Sharpe, Joseph F. Whelan, Richard M. Forester and Ted McConnaughey, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p2538-2544.
A Nested-Model Approach to Investigate Climate Change, Lauren E. Hay and George H. Leavesley, (Water Policy and Management: Solving the Problems, Darrell G.

Fontane, ed. and Harry N. Tuvel, ed., 1994), p477-480. Potential of Vertebrate Studies for Assessing Past Climate Variations, Stephanie D. Livingston, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p2562-2568.

Probabilistic Characterization of Droughts, G. V. Loganathan, S. Mostaghimi, V. K. Lohani and M. K. Tchaou, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p197-200.

Some Results from the Second Iteration of Total-System Performance Assessment for Yucca Mountain, Michael L. Wilson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1655-1662.

Spatial Disaggregation for Studies of Climatic Hydrologic Sensitivity, Daniel Epstein and Jorge A. Ramírez, HY

Dec. 94, p1449-1467

An Updated Fracture-Flow Model for Total-System Performance Assessment of Yucca Mountain, John H. Gauthier, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1663-1670.

The Use of Expert Judgment Elicitation to Predict Future Climate for the Yucca Mountain Nevada Vicinity, Aaron DeWispelare, Michael P. Miklas, Jr., A. Berge Gureghian, L. Tandy Herren, Robert T. Clemen and James R. Park, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1614-1621.

Climatic data

Estimating Ground Snow Loads Using Local Climatological Data, Kenneth J. Fridley, Kathy A. Roberts and J. Bryan Mitchell, ST Dec. 94, p3567-3576.

Statewide Consumptive Use Estimates, T. Teegarden, L. Pochop, G. Kerr and R. Delaney, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p485-488.

Climatology

Is It Possible to Colonize Mars? Jonathan Hurley and Steve Garcia, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p782-786.

Late Glacial Climate Estimates for Southern Nevada the Ostrocode Fossii Record, Richard M. Forester and Alison J. Smith, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Commit-

tee, 1994), p2553-2561.

Late Holocene Climate Derived From Vegetation History and Plant Cellulose Stable Isotope Records From the Great Basin of Western North America, Peter E. Wigand, Martha L. Hemphill and Sikha (Manna) Patra, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2574-2583.

Long-Term Evolution of the Biosphere in the Context of High-Level Waste Repository, Marianne Menut and Catherine Valentin-Ranc, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2152-2159.

Lunar Mining, Carrie Barkhurst, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p811-814.

Molluscs as Climate Indicators: Preliminary Stable Isotope and Community Analysis, Saxon E. Sharpe, Joseph F. Whelan, Richard M. Forester and Ted McConnaughey, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2538-2544.

Sensitivity and Probabilistic Analyses of the Impact of Climatic Conditions on the Infiltration Rate in a Variable Saturated Multilayered Geologic Medium, A. Berge Gureghian, Aaron R. DeWispelare and Budhi Sagar, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1622-1633.

Susceptibility of Reservoirs to Drought Using Palmer Index, William K. Johnson and Roger W. Kohne, WR May/June 93, p367-387.

Tree-Rings and Climate: Implications for Great Basin Pale-oenvironmental Studies, Donald A. Graybill, M. R. Rose and Fred L. Nials, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p.2569-2573.

Warm Weather Ahead?, ET Oct./Nov. 94, p11.

Clinkering

Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994, 0-7844-0034-2, 621pp.

Advances in the Characterization of Cement Clinker, Hiroshi Uchikawa and Shunsuke Hanehara, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p231-313.

CLINKERING

Characterisation of Anhydrous Cement Clinker by Backscattered Electron Imaging and Energy Dispersive X-Ray Analysis, K. L. Serivener, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p79-81.

Fluxes and Mineralizers in the Clinkering Process, A. Palo-mo, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p64.

The Influence of Kiln Atmosphere on Clinker Characteristics, F. P. Sorrentino, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p65-78.

Clinkerine

Measurement of Phase Compositions in Portland Cement Clinkers, F. Sorrentino, (*Cement Manufacture and Use*, Paul W. Brown, ed., 1994), p1-14.

CLINKERING

Practical Importance of Structural Features of Clinker Phases, A. I. Boikova, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p616-617.

Use of Wastes as Fuels in the Cement Industry: Pros & Cons, Ferenc D. Tamás and Márta Pátkai-Horváth, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p82-102.

Clinkerin

Utilization of Waste Solvent Fuels in Cement Manufacturing, Gregory S. Barger, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p41-55.

Classian

Comparison of Two Eductors for Sand Bypassing, Gregory L. Williams and James E. Clausner, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p875-884.

Closed conduits

Void Fraction Measurement Techniques for Gas-Liquid Bubbly Flows in Closed Conduits; A Literature Review, Mahmood Naghash, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p278-288.

Closed form solutions

Analytical Solutions for Harmonic Wave Propagation in Poroelastic Media, Chris Zimmerman and M. Stern, EM Oct. 94, p2154-2178.

Approximate Elastic-Plastic Solution for Axially Loaded Piles, Ernesto Motta, GT Sept. 94, p1616-1624.

Discretization Influence on Regularization by Two Localization Limiters, Antonio Huerta and Gilles Pijaudier-Cabot, EM June 94, p1198-1218.

A Distributed Parameter Model for the Dynamic Analysis of Beam-like Structures with Varied Sectional Properties, Ji Yao Shen, Elias G. Abu-Saba, William M. McGinley, Lonnie Sharpe, Jr. and Lawrence W. Taylor, Jr., (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p110-1293.

Generalized Coulomb Active Earth Pressure for a Distanced Surcharge, Ernesto Motta, GT June 94, p1072-1079.

Hollow Spheres Subjected to Sustained and Variable Loads, Wei Jiang, EM June 94, p1343-1368.

K-Factor for Columns in any Type of Construction: Nonparadoxical Approach, J. Dario Aristizabal-Ochoa, ST Apr. 94, p1272-1290.

Out-of-Plane Buckling of Restrained Thin Rings of General Open Section, J. G. Teng and R. M. Lucas, EM May 94, p929-948.

Clouds

Impact of GOES Data on Surface Heat Flux Predictions, Yi-Fei P. Chu, Keith W. Bedford, Carolyn J. Merry and Jay S. Hobgood, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p212-216.

Clough, Ray

Ray Clough, ASCE Honorary Member, Wins National Medal of Science, NE Oct. 94, p15.

Cnoidal waves

Integral Equation Model for Wave Propagation with Bottom Frictions, Philip L.-F. Liu and Yong-Sik Cho, WW Nov./Dec. 94, p594-608.

Coagulation

Dynamics of Coagulation of Clay Particles with Aluminum Sulfate, Hsiao-Wei Ching, Menachem Elimelech and Janet G. Hering, EE Jan./Feb. 94, p169-189.

The Effects of NOM and Coagulation on Copper Corrosion, John P. Rehring and Marc Edwards, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p26-33.

Evaluation of Enhanced Coagulation for DBP Control, Richard J. Miltner, Sheila A. Nolan, Marcus J. Dryfuse and R. Scott Summers, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p484-491.

Flocculation Kinetics Using Fe(III) Coagulant to Coagulate Kaolin Clay in Water: Effects of Temperature, Lim-Seok Kang and John L. Cleasby, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p162-169.

Modeling Kinetics of Sediment Removal in Water Col-umns, P. L. Shrestha, R. S. Govindaraju and G. T. Orlob, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1065-1069.

Removal of Arsenic by Enhanced Coagulation and Membrane Technology, S. David Chang, Hector Ruiz, William D. Bellamy, Carl W. Spangenberg and Debra L. Clark, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p632-639.

Hydration Mineralogy of Cementitious Coal Combustion By-Products, Gregory J. McCarthy and J. K. Solem-Tishmack, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p103-121.

Coal fired powerplants

Advanced Coal Conversion Solid Wastes: Waste-Management Implications, Charles J. Moretti, EY Apr. 94, p1-16.

Diesel May Clean Coal-Powered Plants, ET Oct./Nov. 94,

U.S. Firm to Engineer Coal-Plant Retrofit in 'Black Triangle', CE Mar. 94, p14,18.

Behavior of Foundations Subjected to Large Ground Movements, Richard M. Bennett, Eric C. Drumm and Guoming Lin, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p49-54.

Gully Erosion Minimization on Reclaimed Surface Mines Using SSAST Computer Model, Rose A. McKenney and Thomas W. Gardner, IR Sept./Oct. 94, p910-924.

Coal mining

Computer-Assisted Coal Mining - An Overview, George H. Schnakenberg, Jr., (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p427-436.

A Real-Time Control Network for Robotic Mining, William H. Schiffbauer, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p437-447.

Cleanup of a Coal Tar Deposit Using a Vacuum Clam, B. G. Bennett, I. K. Hill and A. Z. Erzinclioglu, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p991-1000.

Performance of Fuel-Resistant Sealers for Asphalt Concrete Pavements, James E. Shoenberger, MT Feb. 94, p137-149.

Coal transport

Coal Log Pipeline Technology: State of Development, Henry Liu and Charles W. Lenau, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p280-287.

Coast Guard

Environmental Effects of Flooding at a USCG Base, Virginia L. Bretzke and Michael J. Donnelly, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p781-787.

Beneficial Uses of Dredged Material: Part of the Solution to Restoration of Louisiana's Coastal Wetlands, Linda Glenboski Mathies, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p626-630.

Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Mar-cel, ed. and Nicholas C. Kraus, ed., 1994, 0-7844-0043-

1, 983pp.

Coastal Engineering Data Retrieval System (CEDRS), Danielle S. McAneny and Doyle L. Jones, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p330-338.

Coastal Groins and Nearshore Breakwaters, U.S. Army Corps of Engineers, 1994, 0-87262-998-8, 90pp.

Combined Oscillatory and Steady Flow Over Ripples, K. I. Mahesha Ranasoma and John F. A. Sleath, WW July/ Aug. 94, p331-346.

Conservation Properties of the Mild Slope and Boussinesq Equations, Rodney J. Sobey, (Ocean Wave Measure-ment and Analysis, Orville T. Magoon, ed. and J. Mi-chael Hemsley, ed., 1994), p135-149.

Design of Fluidizer Systems for Coastal Environment, Richard N. Weisman and Gerard P. Lennon, WW Sept./

Oct. 94, p468-487.

The Development of a Wave Data Analysis Standard for a National Wave Measurement Program, Michael Tubman, Marshall Earle and David McGehee, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p547-553. Environmental Restoration and Enhancement

Dredged Material in Chesapeake Bay, Maryland, S. D. Garbarino, R. N. Blama, M. C. Landin, S. R. Maynord and T. R. Patin, (Dredging '94, E. Clark McNair, Jr., ed.,

1994), p384-393.

Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994, 0-87262-975-9, 696pp.

Evaluation of a Third-Generation Wave Model for the U.S. Atlantic Coast, R. E. Jensen, S. H. Houston, C. L. Vincent and M. D. Powell, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p433-447.

Failure Stages in Timber Fixed Piers: Design for Minimal Reconstruction After a Storm, Jon Guerry Taylor and Mark D. Bolchoz, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik,

ed., 1994), p406-413.

Implementing a National Wave Monitoring Network— Some Lessons and Plans, David D. McGehee and J. Mi-Godie Lessons and Flank, David D. McCenee and J. Michael Hemsley, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p208-222.

Kent, Edward, John Richardson and Vijay Panchang, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p56-60.

A Method for Locating Spikes in a Measured Time Series, James P. McKinney, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p388-393

Numerical Modeling of Waves in Harbors, Edward F. Thompson, H. S. Chen and Lori L. Hadley, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p590-601. Restoring and Protecting Marine Habitat, Thomas A. Sands

and Wayne Young, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p368-377.

A Second-Generation Wave Model for Coastal Wave Pre-diction, J. A. Ewing and R. C. Hague, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p576-589.

Stabilization and Expansion of Historic Navy Pier, Patrick M. Doher and Bernard J. Fekete, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p300-310.

Coastal environment

ASA.WAVES: An Interactive PC-based Wave Forecasting Tool, Stéphan T. Grilli, T. Opishinski, M. L. Spaulding and T. Isaji, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed.,

1994), p890-904.

Boundary Forcing and a Dual-Mode Calculation Scheme for Coastal Tidal Models Using Step-Wise Bathymetry, James K. Lewis, Y. Larry Hsu and Alan F. Blumberg, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p422-431.

Catastrophic Hurricanes May Become Frequent Events in Caribbean and Along the United States East and Gulf Coasts, Robert C. Sheets, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p37-51.

Coastal Circulation and Sedimentation During Severe Storms, Timothy R. Keen, Scott M. Glenn and Rudy L. Slingerland, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p279-293.

Coastal Eutrophication and Temperature Variation, Jacques Ganoulis, Stilianos Rafailidis, Istvan Bogardi, Lucien Duckstein and Istvan Matyasovszky, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv,

ed., 1994), p317-330.

Coupled Lake Erie Air-Sea, Storm Resolving Forecasts and Predictions, the Viento Project, John G. W. Kelley, Chieh-Cheng J. Yen, Keith W. Bedford, Jay S. Hobgood and David J. Schwab, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p202-215.

An Energy Based Model for Coastal Bays and Lakes, William S. Appleton, William L. Wood and Yan-Sheng Chang, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994),

Environmental Modeling of Coastal Wetlands, Lisa C. Roig and Robert A. Evans, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p522-535.

Linking Hydrodynamic and Biogeochemical Transport Models for Estuarine and Coastal Waters, J. M. Hamrick, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p591-

Localized Sigma Coordinates for the Vertical Structure of Hydrodynamic Models, Angré B. Fortunato and António M. Baptista, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p323-335.

Magnetic Tracing of Beach Sand: Preliminary Results, Kuno D. van der Post, Frank Oldfield and George Voul-garis, (*Coastal Dynamics '94*, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p323-

334

The Management of Dredged Material Placement for the Development of Oyster Rock on the Eastern Shore of Virginia, Walter I. Priest, III, (Dredging '94, E. Clark

McNair, Jr., ed., 1994), p394-398.

Measurement and Hindcast of Hurricane Iniki Coastal Inundation, Steven Yamamoto, Scott Sullivan and Eiji Nakazaki, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p756-771.

A Multi-Dimensional Transport Model Utilizing a Charac-King, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p407New Technology in Coastal Wave Monitoring, Richard Seymour, David Castel, David McGehee, Juliana Thomas and William O'Reilly, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p105-123.

The Nourtee Experiment of Terschelling: Process-Oriented Monitoring of a Shoreface Nourishment (1993-1996), P. Hoekstra, K. T. Houwman, A. Kroon, P. van Vessem and B. G. Ruessink, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p402-416.

Nowcast System Development for the Straits of Florida, Christopher N. K. Mooers and Dong-Shan Ko, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p158-171.

Numerical Simulations of the CCS under the Joint Effects of Coastal Geometry and Surface Forcing, Yuhe Song and Dale Haidvogel, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p216-234.

Observations Related to the Use of the Sigma Coordinate Transformation for Estuarine and Coastal Modeling Studies, John F. Paul, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p336-350.

Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994, 0-87262-922-8, 1055pp.

Prospects of Vacuum-Assisted Consolidation for Ground Improvement of Coastal and Offshore Fills, S. Thevanayagam, E. Kavazanjian, Jr., A. Jacob and I. Juran, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p90-105.

SEASHELL - Software for the Simulation of Transport and Fate of Pollutants in Coastal Waters, Venkat S. Kolluru and Malcolm L. Spaulding, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p624-640.

Sediment Transport Under Wave-Current Interaction on Macro-Tidal Beaches, Franck Levoy, Olivier Monfort and Hélène Rousset, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p727-741.

Short-Term Forecasts for Lake Erie, John G. W. Kelley, Chieh-Cheng J. Yen, Jay S. Hobgood, David J. Schwab and Keith W. Bedford, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p227-231.

A Spectral Wave Model for the Coastal Zone, L. H. Holspectral wave Model to the Coastal Zone, L. H. Hothuijsen, N. Booij and R. C. Ris, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p630-641.

Validation of a Continental-Scale Storm Surge Model for the Coast of Delaware, David J. Mark and Norman W. colm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p249-263. Scheffner, (Estuarine and Coastal Modeling III, Mal-

Wind-Driven Dispersion in New Jersey Coastal Waters, A. K. M. Quamrul Ahsan, Michael S. Bruno, Lie-Yauw Oey and Richard I. Hires, HY Nov. 94, p1264-1273.

Coastal management

Climate Warming and Great Lakes Management, Benjamin F. Hobbs, Philip T. Chao, Mohammed Nayal and William T. Bogart, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p295-316.

Estimation of Design Surge Heights by Utilizing Meteoro-logic and Oceanographic Data, Jahir Uddin Chowdhury and A. K. M. Tareque, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p918-922.

Experimental Study of Monochromatic Wave-Ebb Current Interaction, Michael J. Briggs and Philip L. -F. Liu, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p474-

Partnering in Environmental Restoration: The Coastal America Model, William L. Klesch, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p449-452.

Planning and Improvement of Coastal Area Utilization, Masatsugu Fukuya, Junji Tanaka, Shigeki Nakamura, Toshiya Taneichi and Hideyuki Kida, (*Marinas, Parks* and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p222-231.

Two Case Studies of Marine Parks & Marinas as Economic and Tourism Activity Stimulators in Brazil, Claudio Brasil do Amaral and John C. Corrough, (), p565-576.

Coastal morphology

- The Aeolus Project: Measuring Coastal Wind and Sediment Systems, D. J. Sherman, B. O. Bauer, R. W. G. Carter, D. Jackson, J. McCloskey, R. G. D. Davidson-Arnott, P. A. Gares, N. L. Jackson and K. F. Nordstrom, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p476-487
- The Delta Flume'93 Experiment, A. S.-Arcilla, J. A. Roelvink, B. A. O'Connor, A. Reniers and J. A. Jiménez, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p488-502
- Validation of Coastal Morphodynamic Models with Field Data, Helen M. Wallace and Tim J. Chesher, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p114-128.

Coastal plains

Herbicide Leaching in a Coastal Plain Soil, W. F. Ritter, R. W. Scarborough and A. E. M. Chirnside, IR May/June 94, p634-649.

Coastal processes

Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p103-113.

Application of a Parametric Long Term Model Concept to the Delray Beach Nourishment Program, Michele Capobianco, Huib J. De Vriend, Robert J. Nicholls and Marcel J. F. Stive, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed.,

1994), p391-401.

Directional Wave Data - Measurements and Modeling Coast of Florida Erosion and Storm Effects Study, Thomas D. Smith and Jon M. Hubertz, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p76-89.

The DUCK94 Nearshore Field Experiment, William A. Birkemeier and Edward B. Thornton, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p815-821.

Erosion Hazards and Coastal Construction Deficiencies Observed on Kauai After Hurricane Iniki, A. Todd Davison, Charles E. Bornman and Melvin Nishihara, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p736-745.

Estimation of V_{6ms}, and Identification of the Iniki Overwash Line on Kaua'i, C. H. Fletcher, T. A. Schroeder, G. M. Barnes, B. M. Richmond and M. A. Hampton, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p746-755.

Field Studies of Variability of Underwater Coastal Relief and Bed Sediment Composition During Storm, Ruben D. Kos'yan and Nicolay V. Pykhov, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicho-

las C. Kraus, ed., 1994), p89-102.

Hurricane Iniki Effects on Coral Sand and Beach Processes on Kauai, Hans-Jürgen Krock and Doug Neill, (Hurri-canes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p782-790.

Modelling Large-Scale Coast Evolution, Zbigniew Pruszak and Ryszard B. Zeidler, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C.

Kraus, ed., 1994), p446-461.

Kraus, ed., 1934), p-ru-rul. Radiogenic Heavy Minerals as Tools in Selective Coastal Transport, R. J. de Meijer, I. C. Tánczos and C. Stapel, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p306-

3-Dimensional Processes Along Sandy Beaches - Dimensions of a Coastal Facility, Ida Brøker, Hakeem Johnson, Erik Asp Hansen, Ann Skou, Peter Justesen and Rolf Deigaard, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p103-113.

Analysis of Sand Movement on Noto Coast by Geochemical Method, Kazumasa Mizumura, Toshiharu Nishimoto and Takahiko Yamamoto, (Hydraulic Engineering '94, George V. Coroneo, ed. and Ralph R. Rumer, ed.,

1994), p923-927.

Coastal and Oceanographic Impact of Hurricane Andrew, Hsiang Wang and Lihwa Lin, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p791-798.

Estimating Laboratory Wave Reflection Using Laser Doppler, Steven A. Hughes, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p918-933.

Irregular Wave Overtopping of Revetments in Surf Zones, Nobuhisa Kobayashi and Andrew W. Raichle, WW Jan./Feb. 94, p56-73.

Irregular Wave Run-Up on Composite Rough Slopes, Marek Szmytkiewicz, Ryszard B. Zeidler and Krystian W. Pilarczyk, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p599-613.

Objectives of Proposed Large Scale Experimental Facility (ESTEX), T. M. Parchure, W. H. McAnally, Jr. and G. Nail, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p809-

Physical Model Tests of Dolos Impact Stresses, J. M. Stallings and J. W. Tedesco, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p67-72.

Physical Modelling of Multidirectional Waves, A. M. Cornett, M. D. Miles and O. G. Nwogu, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p614-629.

Physical Modelling of the Response of Shingle Beaches in the Presence of Control Structures, Tom T. Coates, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p924-

Review of Works Using CRIEPI Flume and Present Work, Ryoichi Kajima and Tsutomu Sakakiyama, (Coastal Dy-namics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p614-627.

The Significance of Hydrodynamic Forces in Coastal Embankment Design, Bang-Fuh Chen, (Ocean Wave Meas-urement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p880-889

Surf-Similarity Parameter for Breaking Solitary-Wave Runup, Nobuhisa Kobayashi and Entin A. Karjadi, WW

Nov./Dec. 94, p645-650.

Wave Deformation in Front of Vertical Wall due to Wave Overtopping, Motohiko Umeyama, WW Sept./Oct. 94, p490-498.

Wave Impacts on Sea Walls and Breakwaters, A. R. Crawford, M. J. Walkden, P. A. D. Bird, G. N. Bullock, P. J. Hewson and J. Griffiths, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p656-670.

Wave Measurement Near Reflective Structures, P. A. D. Bird, M. A. Davidson, G. N. Bullock and D. A. Huntley, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p701-

Wave Runup on and Wave Reflection from Coastal Structures, John P. Ahrens, William N. Seelig, Donald L. Ward and William Allsop, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p489-502.

Wave Runup on Smooth and Rock Slopes of Coastal Structures, Jentsje W. van der Meer and Cor-Jan M. Stam, WW Sept./Oct. 92, p534-550.

Amplified Microbending in Coated Optical Fibres, John Roorda, EM Apr. 94, p917-921.

Concrete Watertight Structures and Hazardous Liquid Containment, Robert Hengst, 1994, 0-87262-791-8,

Corrosion Resistant Epoxy-Coated Reinforcing Steel, Robert G. Mathey and James R. Clifton, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p109-115.

Creating Powder-Coatings Guidelines, ET Dec. 94/Jan. 95,

Recovery and Recycling of Copper from Wastewater using Iron Coated GAC, Kotha P. Reddy, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p392-399.

The Role of Fracture Coatings on Water Imbibition Into Unsaturated Tuff, Vijay S. Chekuri, Scott W. Tyler and John W. Fordham, (High Level Radioactive Waste Man-agement, High Level Radioactive Waste Program Committee, 1994), p1891-1896.

Coded signals

2D Bar-Code Applications in Construction, Bob G. McCullouch and Kamolwan Lueprasert, CO Dec. 94, p739-752.

Application of OOP in Developing Finite Element Analysis Programs Using C++, Jianing Ju and M. U. Hosain, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1916-1919.

Assessment and Upgrade of an Older Transmission Line, Robert O. Kluge and Alain H. Peyrot, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p607-612.

AWS versus AlJ Tubular K-Connection Design Rules, Yoshiaki Kurobane and Kenshi Ochi, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p190-

Balancing Water Allocation and Water Quality: The Model State Water Code, Ken C. Hall, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p469-472.

Changes in Los Angeles Code May Protect Wood Structures (ltr), CE Nov. 94, p32.

Classification of Semi-Rigid Connections Based on the Elastic-Plastic Mechanical Behavior of Frames, Yoshiaki Goto, Satoshi Miyashita and Wai-Fah Chen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1191-1196.

Codification of Wind-Pressure Coefficients for Multispan Gable Roofs, Theodore Stathopoulos and Patrick

Saathoff, ST Aug. 94, p2495-2519.

Comprehensive Reliability Analysis of Prestressed Concrete Beams, A. S. Al-Harthy and D. M. Frangopol, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p193-198.

Convergence and Divergence Between Regulated Riparian and Prior Appropriation Provisions in the ASCE Model and Prior Appropriation Provisions in the Problems, Darrell G. State Water Rights Code, Ray Jay Davis, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p465-468.

FEM in a Design Code Environment, Philip V. DeSantis and James E. Wild, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p454-461.

Flexural Member Bending Strength Limits in the New LRFD Bridge Code, Karl H. Frank, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p544-548.

Harmonization of Reliability-Based Timber Engineering Codes and Standards, Ronald W. Anthony and Jozsef Bodig, (Structures Congress XII, N. C. Baker, ed. and

Barry J. Loodno, ed., 1994), p503-507.

Integrated Spacecraft Environments Model (ISEM), Ray Rantanen and Tim Gordon, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed.

and Statley Lokaj, ed., 1994), p609-617.

IPA Phase 2 Total System code and Scenario Analysis, James R. Park, Robert G. Baca, Norman A. Eisenberg, Ronald W. Janetzke and Budhi Sagar, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1461-1468. Lateral Buckling: A Comparison of AISC-LRFD and Eu-

rocode 3, Reynaud L. Serrette, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p333-336.

Load and Resistance Factors for Bridge Design Code, Andrzej S. Nowak, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p538-543.

Load-Deformation Curves of Normal and High Strength Concrete for a Range of Height to Diameter Ratios, D. C. Jansen and S. P. Shah, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p716-724.

LRFD Provisions for Wood Bridges, Michael A. Ritter and Andrzej S. Nowak, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p549-554.

A Nonlinear-Analysis-Based Procedure for Evaluating Load-Carrying Capacity of In-Plane Steel Frames, Fumio Nishino, Buntara S. Gan and Eiki Yamaguchi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1179-1184.

The Northridge Question: Can We Do Better?, CE May 94,

Representation and Processing of Design Standards: a Bifurcation between Research and Practice, Steven J. Fenves, James H. Garrett and M. Maher Hakim, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p122-127.

Seismic Behavior of Type PR Steel Frames, K. S. Sivakumaran and Sanjiang Chen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p585-590.

Seismic Retrofits Should be Required (ltr), CE July 94,

p28. Site Effects on Strong Shaking and Seismic Risk: Recent Developments and Their Impact on Seismic Design Codes and Practice, Raymond B. Seed, Stephen E. Dickenson and Chin Man Mok, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p573-578

Standard of Care in Civil Litigation, Robert W. Day, EI Арг. 94, р145-148.

Teaching Structural Loading: A Case Study, R. Panneer Selvam, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1375-1378.

Unified Code Provisions for Concrete Bridges, Antoine E. Naaman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p555-560.

The Use of Coda Waves for Characterizing the Site Effect on Strong Ground Motion, Keiiti Aki and Byau-Heng Chin, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p579-584.

Where do the Arrows Come From? Evaluating Structural Loads, Duane S. Ellifritt, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1364-1368.

Estimation of Dispersion Coefficients from Particle Tracks, David A. Chin, EE Jan./Feb. 94, p256-263.

Momentum and Energy Coefficients Based on Power-Law Velocity Profile, Cheng-lung Chen, HY Nov. 92, p1571-1584

Significance of Averaging Coefficients in Open-Channel Flow Equations, Renjie Xia and Ben Chie Yen, HY Feb. 94, p169-190.

Cofferdams

Construction of a Cofferdam Pressure Relief System, J. Taylor, W. L. Galbraith, G. Richters, J. E. Baka and C. C. Chang. (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p93-111.

Stability Theory of Cohesive Crack Model, Yuan N. Li and Robert Y. Liang, EM Mar. 92, p587-603.

Cohesionless sand

Data Analysis of Bed Concentration of Suspended Sediment, Julio A. Zyserman and Jørgen Fredsøe, HY Sept. 94, p1021-1042.

Cohesionless soils

Bearing Capacity of Shallow Foundations on Noncohesive Soils, Bohdan Zadroga, GT Nov. 94, p1991-2008.

Procedures for Elastoplastic Liquefaction Modeling of Sands, A. Anandarajah, EM July 94, p1563-1587. Response Prediction of Granular Materials at Low Effective Stresses, Emir J. Macari-Pasqualino, Kenneth

Runesson and Stein Sture, GT July 94, p1252-1268 Vacuum Design of Welded Steel Pipe Buried in Poor Soil,

Reynold K. Watkins and George J. Tupac, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p226-238.

Cohesive sediment
Assessing the Fate of Dredged Sediments Placed in Open-Water Sites, Northern Chesapeake Bay, Jeffrey Halka, William Panageotou, Lawrence Sanford and Shenn Yu-Chou, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1162-1171.

Does Reentrainment Occur During Cohesive Sediment Set-tling? Y. L. Lau and B. G. Krishnappan, HY Feb. 94,

p236-244.

Measurement and Prediction of Surface Shear Stress in Annular Flume, D. I. Graham, P. W. James, T. E. R. Jones, J. M. Davies and E. A. Delo, HY Sept. 92, p1270-1286.

Modeling Kinetics of Sediment Removal in Water Columns, P. L. Shrestha, R. S. Govindaraju and G. T. Orlob, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1065-1069.

Cohesive soils

Calibration Chamber Studies of Piezocone Test in Cohesive Soils, P. U. Kurup, G. Z. Voyiadjis and M. T. Tumay, GT Jan. 94, p81-107.

Collapse of Geogrid-Reinforced Retaining Structure, Ger-ald A. Leonards, J. David Frost and Jonathan D. Bray, CF Nov. 94, p274-292

Cyclic Axial Loading of Drilled Shafts in Cohesive Soil, Kevin J. McManus and Fred H. Kulhawy, GT Sept. 94, p1481-1497.

Discrete-Element Method for Simulating Behavior of Cohesive Soil, A. Anandarajah, GT Sept. 94, p1593-1613. Drained Residual Strength of Cohesive Soils, Timothy D.

Stark and Hisham T. Eid, GT May 94, p856-871. Dynamic Lateral Pressures Due to Saturated Backfills on

Rigid Walls, Isao Ishibashi, Makoto Osada and Tatsuo Uwabe, GT Oct. 94, p1747-1767. Effect of Nonuniform Stresses on Measured DSS Stress-Strain Behavior, Don J. DeGroot, John T. Germaine and

Charles C. Ladd, GT May 94, p892-912 Performance of Anisotropic Geosynthetic-Reinforced Cohesive Soil Mass, Hoe I. Ling and Fumio Tatsuoka, GT

July 94, p1166-1184. Postcyclic Undrained Strength for Cohesive Soils, Kazuya Yasuhara, GT Nov. 94, p1961-1979.

Seismic Lateral Pressures in Soils with Cohesion, R. Richards, Jr. and X. Shi, GT July 94, p1230-1251.

The TMA Wave-Energy Constraint and Cohesive Shore-Profile Shapes, Charles N. Johnson, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p236-250.

Uplift Capacity of Small-Diameter Drilled Shafts from In Situ Tests, Alan J. Lutenegger and Gerald A. Miller, GT

Aug. 94, p1362-1380.

Dredging in the Bering Sea St. George Island 1993-94 Harbor Dredging Project, William J. Gerken and Jeffrey F. Gilman, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1426-1435.

Effect of Cold Regions Climate on Composite Jacketed Concrete Columns, V. M. Karbhari and D. A. Eckel, II, CR Sept. 94, p73-86.

Impact and Flexure Properties of Glass/Vinyl Ester Composites in Cold Regions, Vistasp M. Karbhari and Gregory Pope, CR Mar. 94, p1-20.

Swelling Behavior of Shales in Cold Regions, Z. W. Wang, S. L. Huang and R. C. Speck, CR Mar. 94, p21-34.

Cold weather construction

Effect of Cold Regions Climate on Composite Jacketed Concrete Columns, V. M. Karbhari and D. A. Eckel, II, CR Sept. 94, p73-86.

Cold-formed steel

Behavior of Gypsum-Sheathed Cold-Formed Steel Wall Studs, Thomas H. Miller and Teoman Pekoz, ST May 94, p1644-1650.

Design Strengths of Cold-Formed Channels in Bending and Torsion, K. T. Kavanagh and D. S. Ellifritt, ST May

94, p1599-1607

How to Optimize Light-Gage, Cold-Formed Steel Beams Scott A. Burns, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p104-112

Load-Eccentricity Effects on Cold-Formed-Steel Lipped-Channel Columns, Thomas H. Miller and Teoman Pekoz, ST Mar. 94, p805-823.

Review of Cold-Formed Steel Purlin Design, Roger A. La-Boube, (Structures Congress XII, N. C. Baker, ed. and Baker, ed. and Barry J. Loodno, ed., 1994), p1578-1580.

Simplified Strength Prediction for Cold-Formed C- and Z-Shapes, R. A. LaBoube, ST June 93, p1733-1739.

Unstiffened Strip Approach for Perforated Wall Studs, Thomas H. Miller and Teoman Pekoz, ST Feb. 94, p410-421.

Coliform bacteria

Biological Reduction of Chromium by E. COLI, Hai Shen and Yi-Tin Wang, EE May/June 94, p560-572.

Control of Microbial Water Quality in the Little Rock, Arkansas Distribution System, Bruno Kirsch, Jr., Craig Noble, Christopher H. Yu, Blaise J. Brazos and John T. O'Connor, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p58-65.

A Nearshore Model for Cleveland CSO Remediation Design Selection, David P. Podber, Chieh-Cheng J. Yen, Lou Regenmorter, Keith W. Bedford and Onyx W. H. Wai, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p222-226.

Reducing Wastewater Sludge Pathogens Using Heat Treatment, Mark Kennedy, Kondapalli Reddy and Lyle Johnson, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p281-288.

Analytical Approach to Collapse Mechanisms of Circular Masonry Arch, Carlo Blasi and Paolo Foraboschi, ST Aug. 94, p2288-2309.

Buckling Behavior of Square-and-Diagonal Double-Layer Grid, Toshitsugu Saka and Yoshiya Taniguchi, ST Apr. 94, p1088-1102.

Case History of a Collapsible Soil Fill, Alan L. Kropp, David J. McMahon and Sandra L. Houston, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1531-1542.

Collapse Behavior of Double-Layer Space Truss Grids with Member Buckling, Toshitsugu Saka and Yoshiya Taniguchi, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U.

Penalba, ed., 1994), p529-538.

Collapse Mechanism of Compacted Clayey and Silty Sands, T. A. Alwail, C. L. Ho and R. J. Fragaszy, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1435-1446.

Collapse of Geogrid-Reinforced Retaining Structure, Gerald A. Leonards, J. David Frost and Jonathan D. Bray,

CF Nov. 94, p274-292.

Compressive Strength of Large Scale HSLA-80 Steel Cel-lular Sections of a Double Hull Ship Structure, Alan Ah-Kum Pang, James M. Ricles, Le-Wu Lu and Perry Green, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1538-1543.

Evaluation and Control of Collapsible Soils, Adnan A. Basma and Erdil R. Tuncer, GT Oct. 92, p1491-1504.

Investigation of L'Ambiance Plaza Building Collapse, Daniel A. Cuoco, David B. Peraza and Thomas Z. Scarangello, CF Nov. 92, p211-231.

Modified Oedometer for Arid, Saline Soils, Omar Saeed Baghabra Al-Amoudi and Sahel N. Abduljauwad, GT

Oct. 94, p1892-1897. Monitoring of Structures During Repair of Underground Utilities, F. Dirk Heidbrink and John E. Pearson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Lood-

no, ed., 1994), p258-263. Nonlinear Collapse of Offshore Jacket Structures, Helen M. Bolt, Colin J. Billington and J. Keith Ward, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p19-24. Plastic Collapse at Lap Joints in Pressurized Cylinders under Axial Load, Jin-Guang Teng, ST Jan. 94, p23-45.

Review of Wetting-Induced Collapse in Compacted Soil, Evert C. Lawton, Richard J. Fragaszy and Mark D. Hetherington, GT Sept. 92, p1376-1394.

Structural Integrity of Space Trusses, Erling Murtha-Smith, Anurag Chaturvedi and Shawn F. Leary, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p409-

Collapse load

Blast Demolition of Reinforced Concrete Industrial Chimneys, Friedhelm Stangenberg, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p290-299.

Collapse Loads of Continuous Skew Composite Bridges, Alaa Helba and John B. Kennedy, ST May 94, p1395-

Design of Box Girder Bridges by Nonlinear Theory, Ahmad Salahuddin, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p491-496.

Limit States Analysis of Masonry Arches, Thomas E. Boothby, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p797-802

Parametric Study on Collapse Loads of Skew Composite Bridges, Alaa Helba and John B. Kennedy, ST May 94, p1415-1433.

Collapsible soils

Case History of a Collapsible Soil Fill, Alan L. Kropp, David J. McMahon and Sandra L. Houston, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1531-1542

Cyclic Behavior of Partially Saturated Collapsible Soils Subjected to Water Permeation, Kenji Ishihara and Kenji Harada, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994),

p34-50.

Evaluation and Control of Collapsible Soils, Adnan A. Basma and Erdil R. Tuncer, GT Oct. 92, p1491-1504.

Evaluation of In-Place Wetting Using Soil Suction Measurements, Kenneth D. Walsh, William N. Houston and Sandra L. Houston, GT May 93, p862-873.

Identification and Characterization of Collapsible Gravels, Kyle M. Rollins, Ralph L. Rollins, Trevor D. Smith and George H. Beckwith, GT Mar. 94, p528-542.

In-Situ Deep Soil Improvement, Geotechnical Special Publication No. 45, Kyle M. Rollins, ed., 1994, 0-7844-0058-X, 150pp.

Mitigation Measures for Small Structures on Collapsible Alluvial Soils, Kyle M. Rollins and G. Wayne Rogers, GT Sept. 94, p1533-1553.

U.S. Experience with Dynamic Compaction of Collapsible Soils, Kyle M. Rollins and Ji-Hyoung Kim, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p26-43.

Collisions

Integrating Computer Applications for Traffic Data Analysis, Patricia B. Noyes and Pete d'Oronzio, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1339-1342. Severity Measures in Side-Impacts with Narrow Roadside

Structures, M. H. Ray, J. F. Carney, III, M. I. Faramawi and L. A. Troxel, TE Mar./Apr. 94, p322-338. Test and Evaluation Criteria for Side-Impact Roadside Ap-

purtenance Collisions, M. H. Ray and J. F. Carney, III, TE July/Aug. 94, p633-651.

Protecting a Pipeline, Manuel Garcia-Lopez and Donald H. Gray, CE Dec. 94, p44-47.

Colorado

Changes of Water Rights - The Colorado Experience, Joe Tom Wood, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p372-375. Colorado DOT Supports Geosynthetics (ltr), CE Sept. 94,

p33.

Deicing Denver, David S. Backer, Don Smith and Craig E. Habben, CE July 94, p56-59.

Depressing Traffic Top-Down, Dan Burroughs, Shyi-Shyong Jiang and Henrie Henson, CE Jan. 94, p62-64. Hit the Road, Metric, CE May 94, p8.

Valley Consolidated Water Distribution System, Vail Valley Consolidated Water District, Vail, Colorado, Mark Rosser and Kevin W. McBrien, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p452-472.

Start-ups, CE Dec. 94, p8.

Vadose-Zone Monitoring, Sanitary Treatment Plant Sludge-Drying Beds, Rocky Flats Plant, Golden, Colora-Shuge-Drying Beds, Rocky Flats Flatt, Golden, Colorado, James R. Kunkel and J. Scott Thompson, (*Water Policy and Management: Solving the Problems*, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p359-362. Wetlands Return to Former Mining Site, CE Oct. 94, p25.

Colorado River

Coarse Sediment Transport and the Maintenance of Fish Habitat in the Upper Colorado River, John Pitlick, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p855-859.

Economic Impacts of Severe and Sustained Drought, Robert A. Young, James F. Booker and Ari M. Michelsen, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed.,

1994), p624-627.

Laboratory and Field Evaluation of Acoustic Velocity Meters, Tracy Vermeyen, (Fundamentals and Advance-ments in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p43-52.

The Law of the Colorado River: Can It Cope With Severe Sustained Drought? Lawrence J. MacDonnell, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p628-631.

Object-oriented Model of Colorado River Salinity, Nancy E. Winter and Steven C. Chapra, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p392-395.

Predicting Hydrologic Impacts of a Severe and Sustained Drought on the Colorado River Basin, Taiye B. Sangoy omi and Benjamin L. Harding, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p616-619.

Columbia River

BPA Realtime Hydrologic Forecasting System for the Co-lumbia River Basin, L. von der Heydt, L. E. Brazil and K. Jawed, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p5-8.

Air Entrapment and Water Infiltration in Two-Layered Soil Column, H. Latifi, S. N. Prasad and O. J. Helweg, IR Sept./Oct. 94, p871-891.

Analytical Model for Steel-Jacketed RC Circular Bridge Columns, Y.H. Chai, M. J. N. Priestley and F. Seible, ST Aug. 94, p2358-2376.

ATLSS Connections with Moment Capacity, Richard B. Garlock, Le-Wu Lu and B. Vincent Viscomi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p743-748.

Column and Beam-Column Design - A World View, N. E. Shanmugam and W. F. Chen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1581-1586.

Column Design in Steel Frames under Gravity Loads, Oscar de Buen, ST Oct. 92, p2928-2935. Critical Concepts for Column Testing, Charles D. Shackel-

ford, GT Oct. 94, p1804-1828. Cyclic Behavior of Joints Between Steel Beams and Reinforced Concrete Columns, Ryoichi Kanno and Gregory G. Deierlein, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1137-1142.

Design Aids for Reinforced Concrete Columns, Bao-Jun Sun and Zhi-Tao Lu, ST Nov. 92, p2986-2995. Design of Lateral Steel in Columns, Shamim A. Sheikh and

Murat Saatcioglu, (Structures Congress XII, N. C. Baker,

ed. and Barry J. Loodno, ed., 1994), p432-437.
Effect of Cold Regions Climate on Composite Jacketed
Concrete Columns, V. M. Karbhari and D. A. Eckel, II,

CR Sept. 94, p73-86.

Effect of Materials Architecture on Strengthening Efficiency of Composite Wraps for Deteriorating Columns in the North-East, I. Howie and V. M. Karbhari, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p199-206.

Effects of Confinement on Concrete Columns: Plasticity Approach, A. I. Karabinis and P. D. Kiousis, ST Sept.

94, p2747-2767

Evaluation of Cast Iron Columns for Safety and Reliability, Joel S. Weinstein, William Lamartina and Mark Tamaro, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1544-1549.

High-Strength Concrete Columns in High-Rise Buildings, Murat Saatcioglu, (Structures Congress XII, N. C. Baker,

ed. and Barry J. Loodno, ed., 1994), p37-42.

High-Strength Concrete Columns: State of the Knowledge,
A. Azizinamini, P. Paultre and M. Saatcioglu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p444-449.

Influence of Concrete Tensile Ductility on Compressive Strength of Confined Columns, L. Bortolotti, MT Nov.

94, p542-563.

Innovative Design of Steel Gable Frames, Thomas Sputo, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p337-342.

K-Factor for Columns in any Type of Construction: Non-paradoxical Approach, J. Dario Aristizabal-Ochoa, ST Apr. 94, p1272-1290.

Load-Eccentricity Effects on Cold-Formed-Steel Lipped-Channel Columns, Thomas H. Miller and Teoman Pekoz, ST Mar. 94, p805-823.

Moment-Rotation Behavior of Pultruded Beam-to-Column Connections, J. T. Mottram and A. J. Bass, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p423-428. Numerical Comparison of Pipe-Column-Separation Mod-

els, Angus R. Simpson and Anton Bergant, HY Mar. 94,

p361-377

Object-Oriented Structural Analysis with Substructures, Richard Sause and Jun Song, (Computing in Civil Engi-neering, Khalil Khozeimeh, ed., 1994), p153-160. One Ninety One Peachtree and NationsBank: Composite

Additions to the Atlanta Skyline, P. V. Banavalkar and J. P. Colaco, (Structures Congress XII, N. C. Baker, ed.

and Barry J. Loodno, ed., 1994), p170-175.

Progress in Reinforced Concrete Column Design, R. Green, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p455-460.

Progress in Reinforced Congress Column Design R.

Progress in Reinforced Concrete Column Design: An Introduction, S. Ali Mirza, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p429-431

Rational Limits for Longitudinal Steel in Concrete Columns, ASCE-ACI Committee 441-Concrete Columns, Subcommittee on Longitudinal Reinforcement Limits, (Furlong, Richard W., chmn.), (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p438Recent Advances in Biaxially Loaded Columns, ASCE-ACI Committee 441, Subcommittee on Biaxially Loaded Columns, (Hsu, C. T. T., chmn.), (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p450-454.

Reliability of Short and Slender Reinforced-Concrete Columns, Sonia E. Ruiz and J. Cipriano Aguilar, ST June

94, p1850-1865.

92

Resistance Mechanisms in RC Building Frames Subjected to Column Failure, Haluk Sucuoğlu, Ergin Çıtıpıtıoğlu and Sinan Altın, ST Mar. 94, p765-782.

Seismic Response and Retrofitting of Non-Ductile Reinforced Concrete Bridges, James Ricles, Yueh-Shiun Yang and M. J. Nigel Priestley, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1226-1231

Seismic Retrofit of R/C Columns with Inadequate Lap Splices, R. S. Aboutaha, M. D. Engelhardt, J. O. Jirsa and M. E. Kreger, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1502-1507.

Seismic Shear Strength of Reinforced Concrete Columns, M. J. Nigel Priestley, Ravindra Verma and Yan Xiao, ST Aug. 94, p2310-2329.

A Shear-Flexure Model for Non-Ductile Reinforced Concrete Bridge Columns under Biaxial Seismic Loading, Yueh-Shiun Yang, James Ricles and M. J. Nigel Priestley, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodon, ed., 1994), p1232-1237.

Simplified Strength Prediction for Cold-Formed C- and Z-Shapes, R. A. LaBoube, ST June 93, p1733-1739.

Slenderness K factor for Leaning Columns, J. Dario Aris-tizabal-Ochoa, ST Oct. 94, p2977-2991.

Stability of Columns under Uniform Axial Load with Semirigid Connections, J. Dario Aristizabal-Ochoa, ST Nov. 94, p3212-3222.

Columns, supports

Confining Reinforcement for Concrete Columns, S. Watson, F. A. Zahn and R. Park, ST June 94, p1798-1824.

Efficient Nonlinear Analysis of Column-Supported Cylinderical Shells, P. L. Gould, R. V. Ravichandran and S. Sridharan, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p927-935.

Honolulu Project's Soil-mix Cutoff Wall is a U.S. First, CE Jan. 94, p90.

Simulated Seismic Load Tests on Reinforced Concrete Columns, S. Watson and R. Park, ST June 94, p1825-1849.

Some Aspects of Compression Member Design in Australia, Murray J. Clarke and Russell Q. Bridge, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1587-1592.

Combined sewers

Combined Stormwater Drainage and Treatment, Jorge Romero-Lozano, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1229-1231.

Computer Control of CSOs, Russell W. Batzell, CE Nov. 94, p58-59.

CSO Rehabilitation Strategies for Urban Areas, Edward H. Burgess and Larry A. Roesner, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p184-193.

East River Modeling of Water Quality for Multiple-Project Assessments, Guy Apicella, Robert Norris, Johanna Newton, Walter Ewald and Angelika Forndran, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p235-248.

The Light at the End of the Sewer: How Interested Parties Negotiated a Consensus Solution to the Combined Sewer Overflow Problem, David S. Bailey, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p204-210.

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A Minimum Mars Mission Approach, Systems Engineering Division Mars Study Team, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1309-1322.

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ASCE Guide to Employment Conditions for Civil Engineers, revised edition (M&R No. 55), Committee on Employment Conditions, (D. Wayne Klotz, chmn.), 1994, 0-7844-0057-1, 30pp.

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Site Characterization and Related Activities at the Potential High-Level Radioactive Waste Repository Site at Yucca Mountain, Nevada, Carl P. Gertz, Paul L. Cloke, Robert M. Nelson, Jr. and Maxwell B. Blanchard, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2291-2296.
Standards and Regulations for Geologic Disposar of High

Level Waste: An Issues Framework, S. S. Sareen, S. J. Brocoum and T. A. Cotton, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p1393-1396.

Surface Water Quality Modeling in the Rio Grande, Nicole Seguin, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p778-781.

U. S. NRC Staff Views on the Technical Bases for Yucca Mountain Standards, Margaret V. Federline, Janet P. Kotra and James R. Firth, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1422-1428.

Using Performance Assessment for Radioactive Waste Disposal Decision Making—Implementation of the Methodology into the Third Performance Assessment Iteration of the Greater Confinement Disposal Site, David P. Gallegos, Stephen H. Conrad and Thomas A. Baer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1671-

1681.

Composite beams

Behavior of Graphite/Epoxy Concrete Composite Beams, M. Saiidi, F. Gordaninejad and N. Wehbe, ST Oct. 94, p2958-2976.

Composite Beam Element with Layerwise Plane Sections, Youngchan Kim, Julio F. Davalos and Ever J. Barbero, EM May 94, p1160-1166.

Creep Effects in Composite Beams with Flexible Shear Connectors, Angelo Marcello Tarantino and Luigino Dezi, ST Aug. 92, p2063-2081.

Creep in Composite Continuous Beams. II: Parametric Study, Luigino Dezi and Angelo Marcello Tarantino, ST July 93, p2112-2133.

Cyclical Behavior of Welded Steel Shear Studs, Kurt Michael McMullin and Abolhassan Astaneh-Asl, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1024-1029.

Experimental and Numerical Studies of Composite Beams Exposed to Fire, Dietmar Hosser, Thomas Dorn and Osa-

ma El-Nesr, ST Oct. 94, p2871-2892.

Fiber-Optic Bragg Grating Sensor for Nondestructive Evaluation of Composite Beams, Benxian Chen, M. H. Maher and Edward G. Nawy, ST Dec. 94, p3456-3470.

Flexural Strength of Profiled Beams, Deric J. Oehlers, Howard D. Wright and Matthew J. Burnet, ST Feb. 94, p378-393. Reinforced Concrete Beams with Plates Glued to Their Soffits, Deric John Oehlers, ST Aug. 92, p2023-2038. Shear Connection in Haunched Composite Beams with Sloping Sides, Deric John Oehlers and Sung Moo Park, ST July 94, p2227-2232.

Simplified Creep Analysis of Composite Beams with Flexible Connectors, Luigino Dezi, Carlo Ianni and Angelo Marcello Tarantino, ST May 93, p1484-1497.

Composite coatings

Analysis of a Concrete Cylinder with a Composite Hoop Wrap, Christopher P. R. Hoppel, Travis A. Bogetti, John W. Gillespie, Jr., I. Howie and Vistasp M. Karbhari, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p191-198.

Composite columns

Analysis of a Concrete Cylinder with a Composite Hoop Wrap, Christopher P. R. Hoppel, Travis A. Bogetti, John W. Gillespie, Jr., I. Howie and Vistasp M. Karbhari, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p191-198.

Ductility of Concrete-Filled Steel Box Columns under Cy clic Loading, Tsutomu Usami and Hanbin Ge, ST July 94, p2021-2040.

Load Carrying Capacity of SPC Composite Column, Toshiyuki Tanaka, Kazuo Inoue and Cheol-hwan Kim, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p827-832.

Rigid Beam-To-Column Connection Detail for Circular Composite Columns, Atorod Azizinamini and Y. Shekar, (Structures Congress XII, N. C. Baker, ed. and Barry J.

Congress Art, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1155-1160.

Seismic Performance of Steel-Encased Composite Columns, James M. Ricles and Shannon D. Paboojian, ST Aug. 94, p2474-2494.

Composite fabrication

ATLSS Connectors in Semi-Rigid Composite Connections, Alan M. Rosa, Le-Wu Lu and B. Vincent Viscomi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1149-1154.

Poirot Calls for Synergy at Composites Conclave in Cin-cinnati, CE Apr. 94, p72,74.

Composite masonry Composite Walls as Shear Elements in Tall Structures, Howard Wright, Anwar Hossain and Stewart Gallocher, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p140-145.

Use of Composite Timber-concrete Floors in Residential Buildings, B. H. Ahmadi and M. P. Saka, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p508-513.

Composite materials

Advances in Strain-Hardening Cement Based Composites, Victor C. Li, (Advances in Cement and Concrete, Mi-chael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p235.

Asphalt Portland Cement Concrete Composite: Laboratory Evaluation, I. L. Al-Qadi, H. Gouru and R. E. Weyers, TE Jan/Feb. 94, p94-108.

Behavior of Bolted Joints in 3-D Braided Composites, Rona L. Reid and Aly El-Shiekh, (Engineering. Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p287-295

Bending of Cord Composite Plates, Carol Kittredge Shield and George A. Costello, EM Apr. 94, p876-892.

Bolted Connections for GFRP Laminated Structural Mem-bers, Nahla K. Hassan, Charles N. Rosner and Sami H. Rizkalla, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1018-1025.

Bridge Rehabilitation Using Composite Materials, William W. Finch, Jr., Michael J. Chajes, Dennis R. Mertz, Victor N. Kaliakin and Ahmad Faqiri, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1140-1147.

Carbon and Steel Microfiber-Reinforced Cement-Based Composites for Thin Repairs, Nemkumar Banthia and Sylvie Dubeau, MT Feb. 94, p88-99.

Characterizing Fracture Behavior of Fiber-Reinforced Composites, Surendra P. Shah, Yixin Shao and Zongjin Li, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p186-199. The Chemistry of MDF Materials, M. R. Silsbee and D. M. Roy, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p193-209.

Colloidal Fouling of Reverse Osmosis Membranes, Menachem Elimelech and Xiaohua Zhu, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p329-335

Construction Use of Polyester Composite Using Recycled PET, Karim S. Rebeiz, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994),

Convergence Rates of the Method of Successive Elastic Solutions in Thermoplastic Problems of a Layered Con-centric Cylinder, Todd O. Williams and Marek-Jerzy Pindera, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p348-357.

Crack Width Control with Engineered Cementitious Composites in R/C Structures, Mohamed Maalej and Victor C. Li, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p359-366.

Damage Containment and Residual Strength of Composite

Laminates, C. S. Chu, AS Apr. 94, p240-243.

Design and Construction of Fiberglass Composite Building, Ed (Ahmed) Morsi and J. Larralde, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p751-757.

Design Basis for Creep in Composites Structures, Richard E. Chambers and Ayman S. Mosallam, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham,

ed., 1994), p265-271.

Determination of Interfacial Debond Mode for Fiber-Reinforced Cementitious Composites, Victor C. Li and

Yin-Wen Chan, EM Apr. 94, p707-719

Development, Testing and Modeling of Ceramic Composites for Lunar Applications, János C. Tóth and Chandra S. Desai, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p358-367.

Durability of Composite Material Reinforcement, Michael J. Chajes, Dennis R. Mertz, Theodore A. Thomson, Jr. and Cory A. Farschman, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994),

p598-605.

Durability of Steel/Composites Bonds for Rehabilitation of Structural Components, Pierre E. Bourban, Steven H. McKnight, Stacy B. Shulley, Vistasp M. Karbhari and John W. Gillespie, Jr., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p295-302

Effect of Cold Regions Climate on Composite Jacketed Concrete Columns, V. M. Karbhari and D. A. Eckel, II, CR Sept. 94, p73-86.

The Effect of Composite Reinforcement on Structural Wood, Beckry Abdel-Magid, Habib J. Dagher and Tod Kimball, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p417-424.

Effect of Materials Architecture on Strengthening Efficiency of Composite Wraps for Deteriorating Columns in the North-East, I. Howie and V. M. Karbhari, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p199-206.

Even with Innovative Materials, the Basics Still Matter, James Warner, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p72-79.

Fiber Composite Warp for Rehabilitation of Concrete Structures, Salem S. Faza and Hota V. S. GangaRao, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1135-1139.

Fiber-Glass Composite Aircraft Pad for Crop Dusting, Srinivasa L. Iyer, Vijayakumar Ranganathan and Terry Gross, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p743-750.

Fibre Reinforced Concrete - Myth and Reality, Sidney Mindess, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p217-222.

Finite Element Analysis of Thin-Walled Curved Beams Made of Composites, G. S. Palani and Sundaramoorthy Rajasekaran, ST Aug. 92, p2039-2062.

Flexural Response of FRP Reinforced Concrete Structures, El-Attar A. El-bar, Ibrahim M. Ibrahim and Ayman S. Mosallam, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p583-591.

Flexural Strength of Fiber Cementitious Composites, Mohamed Maalej and Victor C. Li, MT Aug. 94, p390-

Flexural/Tensile-Strength Ratio in Engineered Cementitious Composites, Mohamed Maalej and Victor C. Li, MT Nov. 94, p513-528.

Free Vibrations of Laminated Anisotropic Cylindrical Shells, P. R. Heyliger and A. Jilani, EM May 93,

p1062-1077.

Fundamental Considerations of Design and Durability in Composite Rehabilitation Schemes for Steel Girders with Web Distress, S. B. Shulley, X. Huang, V. M. Karbhari and J. W. Gillespie, Jr., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1187-1194.

High Modulus Glass-ceramic Fiber Reinforced Composites for Currently Emerging Infrastructure Applications, Frederick T. Wallenberger, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994),

p272-279.

Hygrothermal Effects in Composite Sandwich Panels, Charles E. S. Ueng and Jonathan D. Sherrill, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p306-315.

Impact and Flexure Properties of Glass/Vinyl Ester Composites in Cold Regions, Vistasp M. Karbhari and Greg-

ory Pope, CR Mar. 94, p1-20.

Induction Heating for Rehabilitation of Steel Structures Using Composites, Pierre E. Bourban, Erdal Karamuk, Roderic C. Don and John W. Gillespie, Jr., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p287-294.

Inelastic Response of Metal Matrix Composite Tubes, Robert S. Salzar and Furman W. Barton, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p266-275.

Cantiway, Cu. and Stattley Lowal, etc., 1994), p.200-275.

Late Stage Damage in G30-500/PMR-15 Laminates,
Wieslaw K. Binienda, Anping Hong, Andrew Gyekenyesi and John Hemann, Engineering, Construction,
and Operations in Space IV, Rodney G. Galloway, ed.
and Stanley Lokaj, ed., 1994), p316-325.

Local Buckling of Pultruded FRP Beams: Theory and Experiment, L. C. Bank, M. Nadipelli, T. R. Gentry and J. S. Yin, (Structures Congress XII, N. C. Baker, ed. and

Barry J. Loodno, ed., 1994), p417-422.

Long Term Performance of Fiber Reinforced Cements and Concretes, Arnon Bentur, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p223-234.

Mechanical Properties of Kaolinite/Fiber Soil Composite, M. H. Maher and Y. C. Ho, GT Aug. 94, p1381-1393.

Mechanical Properties, Microstructure and Durability of Portland Cement-Based Systems Containing Micro-Reinforcement, Norman M. P. Low, I. Gagnon and J. J. Beaudoin, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p200-216.

Mechanics of Curved Fiber Bundles in Composites, David W. Jensen, Suresh P. Pai, Timothy R. Pickenheim and Colleen M. McCarty, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p276-286.

Mechanistic Model of the Creep-Rupture Process in Filamentary Composites, Kerry T. Slattery, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham,

ed., 1994), p215-222.

60. 1994, p213-222.
Modeling of Fiber Pullout in Cement Based Composites
Using an R-Curve Approach, B. Mobasher and C. Y. Li,
(Infrastructure: New Materials and Methods of Repair,
Kim D. Basham, ed., 1994), p559-566.

More Testing for Composites, ET Oct./Nov. 94, p11.

New Directions for Cement-Based Materials, J. Francis Young, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p610-611. New Formulation for Elastic Modulus of Fiber-Reinforced, Quasibrittle Matrices, Jamil M. Alwan and Antoine E. Naaman, EM Nov. 94, p2443-2460.

Nonlinear Analysis of Angle-Ply Composite and Sandwich Laminates, T. Kant and J. R. Kommineni, AS July 94,

p342-352.

Polymer Cement Composite - A Critical Review, Satish Chandra, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p15-36.

Seismic Retrofit of Existing Reinforced Concrete Columns by Glass-Fiber Composites, L. Jin, H. Saadatmanesh and M. R. Ehsani, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p753-763.

Small Diameter Fibers/Micro Fibers for Reinforcement of Thin Sheet Products, Ziad Bayasi and Jack Zeng, (Infrastructure: New Materials and Methods of Repair, Kim

D. Basham, ed., 1994), p380-385.

Special Considerations in the Design of Connections for Recycled Wood/Plastic Composite Lumber, George H. Kyanka, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p929-933.

Static Behavior of Pultruded GFRP Sections, Hota V. S. GangaRao and V. Nagaraj, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994),

p844-848.

Steel-Concrete Interaction by Means of Film Sensors, Marco di Prisco and Alessandro Gandelli, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p815-820.

Stress and Displacement of Thick Doubly Curved Laminated Shells, Chih-Ping Wu and Chi-Chuan Liu, EM July

94, p1403-1428.

Surface Preparation of Steel for Adhesive Bonding in Rehabilitation Applications, Steven H. McKnight, Pierre E. Bourban, John W. Gillespie, Jr. and Vistasp M. Karbhari, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1148-1155.

Tensile Fracture of Carbon Whisker Reinforced Cement Based Composites, B. Mobasher and C. Y. Li, (Infrastructure: New Materials and Methods of Repair, Kim

D. Basham, ed., 1994), p551-558.

Thermal Cycling of Thin and Thick Ply Composites, Stephen S. Tompkins, James Y. Shen and Andre J. Lavoie, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994, p326-335.

An Ultra-Lightweight Advanced Technology Telescope for Space Applications, P. C. Chen, R. J. Oliversen, H. Hojaji, W. K. Chu and T. L. Wilson, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1422-1430.

Usage of Adhesives and Composites in Highway Structures, Hani G. Melhem and John R. Schlup, (Infrastructure: New Materials and Methods of Repair, Kim D.

Basham, ed., 1994), p983-990.

Wood Fiber Reinforced Cement Composites Under Wetting-Drying and Freezing-Thawing Cycles, Parviz Soroushian, Shashidhara Marikunte and Jong-Pil Won, MT Nov. 94, p595-611.

Composite structures

Accurate Estimation of Interface Shear Stresses in Composite Masonry Walls, Subhash C. Anand and M. Ayubur Rahman, ST Mar. 94, p998-1015.

Aging Effect on Bond Strength in Composite Sections, Yasser M. Hunaiti, MT Nov. 94, p469-473.

Analysis of Composite Panels Using Newton's Method, Norman F. Knight, Jr., (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p147-155.

Attempts to Introduce New Materials into Bridging, Edward Mark Lenoe, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p64-71.

Axisymmetric Vibrations of Thick-Walled Cylindrical Tubes in the Presence of Thermal Residual Stresses, Victor Birman, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p257-265.

Comparison of Donnell and Higher Order Nonlinear Modfor Dynamically Loaded Composite Plates and Shells, Arthur E. Forral and Anthony N. Palazotto, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p99-108.

Creep Analysis of Composite Steel-Concrete Members with Deformable Connectors, F. Mola, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p737-742

Cyclic Behavior of Joints Between Steel Beams and Reinforced Concrete Columns, Ryoichi Kanno and Gregory G. Deierlein, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1137-1142.

Damage Tolerance of Thin Composite Reinforced Membrane Structures, Levon Minnetyan, (Engineering, Construction, and Operations in Space IV, Rodney G. Gal-Deck Panels, Robert E. Abendroth, ST Nov. 94, p3223-

3242

Dynamics of Laminated Plates with Layer Waviness, Raouf A. Raouf, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p109-115.

Evaluation of Commercial Wood-Cement Composites for Sandwich-Panel Facing, Gebran N. Karam and Lorna J.

Gibson, MT Feb. 94, p100-116. First Bank Place: A Composite Cruciform Spine, P. V. Banavalkar, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p134-139. Gateway to Columbus, John Hillman and Daniel K. Bur-

roughs, CE Dec. 94, p58-61. Guidelines for Design of Joints between Steel Beams and Reinforced Concrete Columns, ASCE Task Committee on Design Criteria for Composite Structures in Steel and Concrete, ST Aug. 94, p2330-2357.

Inelastic Response of Metal Matrix Composite Tubes, Robert S. Salzar and Furman W. Barton, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p266-275.

Large Deformation Theory Using Truncated Rotations, Daniel A. Miller and Anthony N. Palazotto, (Engineering, Construction, and Operations in Space IV, Rodney Galloway, ed. and Stanley Lokaj, ed., 1994), p137-

Modal Interaction in the Response of Laminates, Jamal F. Nayfeh, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj,

ed., 1994), p89-98.

Nonlinear Analysis of Stiffened Laminated Cylindrical Shells Using the Layerwise Theory of Reddy, M. Savoia and J. N. Reddy, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p127-136. Nonlinear Geometric and Material Behavior of Shell Struc-

tures with Large Strains, S. A. Schimmels and A. N.

Palazotto, EM Feb. 94, p320-345.

The Normandie Bridge, Michel Virlogeux, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p660-665.

One Ninety One Peachtree and NationsBank: Composite One vinety One reactitree and NationsBank: Composite Additions to the Atlanta Skyline, P. V. Banavalkar and J. P. Colaco, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p170-175.

Plastic in the Forest, CE July 94, p8.

Postbuckling Response of Doubly-Curved Shallow Panels Under Combine Lording Conditions.

Under Complex Loading Conditions, L. Librescu and M. Y. Chang, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p116-126. The Price is Right for Composite Canopy, CE May 94,

Recent Developments in Seismic Response of Composite Structures, Bahram M. Shahrooz, David A. Kramer and Mark E. Remmetter, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p158-163.

Recent Studies of the Behaviour of Semi-Rigid Composite Connections, David A. Nethercot and Riccardo Zandonini, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1143-1148. Seismic Performance of Steel-Encased Composite Columns, James M. Ricles and Shannon D. Paboojian, ST Aug. 94, p2474-2494.

Simplified Calculation Method for Force Transfer in Composite Columns, Jan A. Wium and Jean-Paul Lebet, ST Mar. 94, p728-746.

Snap Buckling of a Delaminated Layer in a Composite Cylinder, Wan-Lee Yin, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p156-165

Stability Analysis for Multilayered Rubble Bases, Wojciech Sulisz, WW May/June 94, p269-282.

Standard for the Structural Design of Composite Slabs (ANSI/ASCE 3-91) Standard Practice for Construction and Inspection of Composite Slabs (ANSI/ASCE 9-91) (St No. 91-003, 91-009), American Society of Civil Engineers, 1994, 0-87262-954-6, 90pp.

Steel-Deck-Reinforced Concrete Diaphragms. 1, W. Samu-el Easterling and Max L. Porter, ST Feb. 94, p560-576.

Steel-Deck-Reinforced Concrete Diaphragms. II, Samuel Easterling and Max L. Porter, ST Feb. 94, p577-596.

Thermoelastic Theory of Cylindrical Sandwich Shells with Piezoelectric Sensors or Actuators, Victor Birman, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p80-88.

Composting Soil Washing and Biotreatment of Petroleum-Contaminated Soils, Alok Bhandari, Dennis C. Dove and John T. Novak, EE Sept./Oct. 94, p1151-1169.

Compressed air

Effects of Air Compression and Counterflow on Infiltration into Soils, M. E. Grismer, M. N. Orang, V. Clausnitzer and K. Kinney, IR July/Aug. 94, p775-795.

Compressibility

Compressibility for Sand Under One-Dimensional Loading Condition, Ching S. Chang, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1298-1311.

Compressibility of Clays: Fundamental and Practical Aspects, Serge Leroueil, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p57-76.

Conical Test Load Measuring Compressibility, John H. Schmertmann, GT May 93, p965-971.

Cyclic Loading for the Measuring of Soil Consolidation Parameters, Alain Vuez and Abdou Rahal, (Vertical and Horizontal Deformations of Foundations and Embank-ments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p760-774.

Modeling Settlements of an Existing Municipal Solid Waste Landfill Sideslope Using an Earthen Surcharge Pile, William L. Deutsch, Jr., Owen R. Esterly and John Vitale, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1135-1148.

Settlement of a Silo Subjected to Cyclic Loading, Marco Favaretti and Alberto Mazzucato, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p775-

Settlement of Embankments on Soft Clays, Gholamreza Mesri, Dominic O. Kwan Lo and Tao-Wei Feng, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p8-56.

Compression

Behavior of Foundations Subjected to Large Ground Movements, Richard M. Bennett, Eric C. Drumm and Guoming Lin, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p49-54.

C_o/C_c Concept Applied to Compression of Peat, Patrick J. Fox, Tuncer B. Edil and Li-Tus Lan, GT Aug. 92,

p1256-1263.

Compression Response of Cracked Reinforced Concrete, F. J. Vecchio and M. P. Collins, ST Dec. 93, p3590-3610.

Compression-Member Models for Space Trusses: Review, Erling Murtha-Smith, ST Aug. 94, p2399-2407.

Deformation of Fill Slopes Caused by Wetting, Iraj Noorany, Joel A. Sweet and Ian M. Smith, (*Stability and Performance of Slopes and Embankments II*, Raymond B. Seed, ed. and Ross W. Boulanger, ed., 1992), p1244-1257.

Effect of Cold Regions Climate on Composite Jacketed Concrete Columns, V. M. Karbhari and D. A. Eckel, II, CR Sept. 94, p73-86.

Effective Width of Locally Buckled Plates in Compression and Bending, Tsutomu Usami, ST May 93, p1358-1373.

Elastic Buckling Strength of Gusset Plate Connections, J. J. Roger Cheng, Michael C. H. Yam and S. Z. Hu, ST Feb. 94, p538-559.

Field Test of Thermal Precompression, Tuncer B. Edil and Patrick J. Fox, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1274-1286.

Heterogeneous Hardening Plasticity Model for Concrete, H. C. Chan, Y. K. Cheung and Y. P. Huang, ST Jan. 94,

p46-62.

Local Buckling of Pultruded FRP Beams: Theory and Experiment, L. C. Bank, M. Nadipelli, T. R. Gentry and J. S. Yin, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p417-422.

Material Model for Concrete in Cracked and Uncracked States, R. Meyer, H. Ahrens and H. Duddeck, EM Sept.

94, p1877-1895.

Stress-Strain Curves for Brick Masonry in Biaxial Compression, Krishna Naraine and Sachchidanand Sinha, ST June 92, p1451-1461.

Compression index

C_o/C_c Concept Applied to Compression of Peat, Patrick J. Fox, Tuncer B. Edil and Li-Tus Lan, GT Aug. 92, p1256-1263.

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One-Dimensional High-Pressure Compression of Granular Media, M. M. Hagerty, D. R. Hite, C. R. Ullrich and D. J. Hagerty, GT Jan. 93, p1-18.

One-Dimensional Shock and Quasi-Static Liquefaction of Silt and Sand, Jane M. Bolton, Deanna S. Durnford and Wayne A. Charlie, GT Oct. 94, p1874-1889.

Testing and Predicting the Movement of a Drilled Shaft in New Mexico, Koon Meng Chua, Wimpie A.N. Aspar and Robert Meyers, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p279-290.

Compressive strength

Compression Strength of Pultruded Flat Sheet Material, J. T. Mottram, MT May 94, p185-200.

Compression Strength of Pultruded FRP Materials, Ever J. Barbero and John Tomblin, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p836-843.

Compressive Strength of Large Scale HSLA-80 Steel Cellular Sections of a Double Hull Ship Structure, Alan Ah-Kum Pang, James M. Ricles, Le-Wu Lu and Perry Green, (Structures Congress XII. N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1538-1543.

Compressive Strength of Masonry Prisms, Magdi A. Khalifa and Ahmed E. Magzoub, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1100-1105.

Damage Containment and Residual Strength of Composite Laminates, C. S. Chu, AS Apr. 94, p240-243.

Evaluation of Cast Iron Columns for Safety and Reliability, Joel S. Weinstein, William Lamartina and Mark Tamaro, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1544-1549.

Evaluation of Silane Sealer Application on Concrete, Doran L. Glauz and Vijay K. Jain, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p155-162. Feasibility of Dual Technology in Manufacturing Lunar Concrete, Mohsen A. Issa and Husam A. Omar, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p933-941.

Influence of Concrete Tensile Ductility on Compressive Strength of Confined Columns, L. Bortolotti, MT Nov. 94, p542-563.

Influence of Specimen Size on Effect of Curing Regime on Concrete Compressive Strength, I. Soroka and H. Baum,

MT Feb. 94, p15-22. Innovative Civil Engineering Material from Sewage Sludge: Biocement and Its Use As Blended Cement Material, Joo-Hwa Tay and Kuan-Yeow Show, MT Feb. 94, p23-33.

Load Rate Effects on Concrete Compressive Strength, Joseph W. Tedesco, C. Allen Ross and Mary L. Hughes, (Structures Congress XII, N. C. Baker, ed. and Barry J.

Loodno, ed., 1994), p245-251.

Load-Deformation Curves of Normal and High Strength Concrete for a Range of Height to Diameter Ratios, D. C. Jansen and S. P. Shah, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p716-724.

Long-Term Strength Development of Pavement Concretes, David A. Lange, MT Feb. 94, p78-87.

New Approaches for Determination of Rock and Rock Mass Properties at Dredging Sites, Hardy J. Smith, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p259-

Optimization of Curing of Silica Fume Concrete, Mohammad Shamim Khan and Michael E. Ayers, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p820-827.

Properties of High Fly Ash Content Cellular Concrete, Ronald D. Neufeld, Luis E. Vallejo, Wenyi Hu, Martin Latona, Christopher Carson and Christopher Kelly, EY Apr. 94, p35-48.

Simulation of Correlated Nonstationary Lumber Properties, Frank Lam, Yin-Tang Wang and J. D. Barrett, MT Feb. 94, p34-53.

Steel Compression Member Design in the 1994 Canadian Standard, D. J. Laurie Kennedy, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p221-226.

Testing of Hollow Clay Tile Masonry Prisms, W. D. Jones and M. B. Butala, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1094-1099.

ed. and Barry J. Loodno, ed., 1994), p1094-1099.

Utilization of Used Foundry Sand in Concrete, Tarun R.

Naik, Viral M. Patel, Dhaval M. Parikh and Mathew P.

Tharaniyil, MT May 94, p254-263.

Compressors

Graphic Visualization for Planning Heavy Lifts, Parmanand V. Dharwadkar, Koshy Varghese, James T. O'Connor and Thomas M. Gatton, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p759-766.

Computation

Analysis and Computation, Franklin Y. Cheng, ed., 1994, 0-87262-974-0, 398pp.

Anatomy of Best Estimate, Leo R. Beard, HY June 94, p679-692.

An Automated Environment for Parallel Computing, E. D. Sotelino, D. W. White and W. F. Chen, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p193-202. Automation Raises Lift Planning Out of Manuals, ET

June/July 94, p9.
Bearing Capacity of Shallow Foundations on Noncohesive Soils, Bohdan Zadroga, GT Nov. 94, p1991-2008.

Bridge Pier Scour Equations - An Assessment, Alimul Qadar and Sarfaraz A. Ansari, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p61-67.

Brief Summary of National Bridge Scour Data Base, Mark N. Landers, J. Sterling Jones and Roy E. Trent, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p41-45.

K. Kunier, ed., 1994), ps1-45.
A Computational Algorithm for Analysis of Rectangular Footings Under Partial Contact with Soil, P. Rajendran, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p652-659.

Computer Calculations Speed Tunnel-Lining Design, Gerhard Sauer, Vojtech Gall and Erich Bauer, CE June

94, p46-49.

Computing and Design in Structural Engineering A Practicing Engineer's Point of View, Richard A. Parmelee, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p369-376.

Concurrent E-I Algorithm in Structural Dynamics, E. D. Sotelino, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p169-176.

Effect of Fractures on Repository Dryout, Roger R. Eaton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2442-2449.

Expert Analysis in Regulated Irrigation Canal Modelling, Forrest M. Holly, Jr. and John P. Parrish, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p92-96.

Fatigue Damage Accumulation Under Stochastic Stress Histories, Shahram Sarkani, Naser K. Buresli and George Michaelov, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p839-844.

Finite Element Analysis of Shear in RC Girders, Pascal Casanova, Merret Fliedner, Pierre Rossi and Franz-Josef Ulm, (Analysis and Computation, Franklin Y. Cheng,

ed., 1994), p223-229.

Flange Local Buckling and Behavior of I-Sections, Iqbal S. Sohal and Liping Cai, (Analysis and Computation,

Franklin Y. Cheng, ed., 1994), p213-222.

Fortification of MMOC Models for Steep-Channel Flows, Chintu Lai, Der-Liang Young and Jen-Ter Chang, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1290-1294.

A Generalized Approach to the Local Stability of Stiffened Plates: Part I-Mathematical Formulation, Osama Bedair and Archibald Sherbourne, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1526-

1531.

IPA Phase 2 Total System code and Scenario Analysis, James R. Park, Robert G. Baca, Norman A. Eisenberg, Ronald W. Janetzke and Budhi Sagar, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1461-1468.

Large-Scale Computations in Analysis of Structures, D. B. McCallen and G. L. Goudreau, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p183-192.

Modeling 3-D Ground Water Mounding, Tswn-Syau Tsay, John Hoopes, Salwa Rashad and Yahia Majali, (Hydrau lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p317-321.

The MOUSE Uncertainty Analysis System, Albert J. Klee, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p372-379.

Non-Linear Solution Methods for Shell and Spatial Structures, M. Papadrakakis, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and

Celina U. Penalba, ed., 1994), p180-189.

Numerical Model Verification Using SUPERTANK Data in Surf and Swash Zones, Daniel T. Cox, Nobuhisa Ko-bayashi and David L. Kriebel, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p248-262.

Potential-Flow Solution to 2D Transition from Mild to Steep Slope, J. S. Montes, HY May 94, p601-621.

Practical Method for Calculating Contraction Scour, E. V. Richardson and J. R. Richardson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p6-10.

Precedents in Design: A Computational Model for the Organization of Case Knowledge, Rivka Oxman, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p438-445.

Program Takes the Stress Out of Calculating, CE May 94, p94.

The Reactivity Effects of Nuclide Buildup and Decay During Long-Term Fuel Storage, T. Suto, S. M. Bowman and C. V. Parks, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p831-837.

San Francisco Bay Test Case for 3-D Model Verification, Peter E. Smith, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p885-

Second Order Irregular-Wave Generation in Flumes -Computation of Transfer Functions by an Asymptotic Summation Method, Hemming A. Schäffer, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p784-797.

Sensitivity Analysis of Bridge Equations, Jeffrey S. Glenn, (Hydraulic Engineering '94, George V. Cotroneo, ed. (Hydraulic Engineering '94, George V and Ralph R. Rumer, ed., 1994), p11-15.

Shaft Performance in Taylor Marl-Field Measurements vs. Numerical Modeling, David B. Spires, Fei Duan and Marek Mrugala, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p779-784.

Simple Live Load Distribution Factors for Girder Bridges, Sami W. Tabsh, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p497-502.

Simulating Structural Analysis with Neural Network, James

L. Rogers, CP Apr. 94, p252-265.

Stiffness of Low Rise Reinforced Concrete Shear Walls, Working Group on the Stiffness of Concrete Shear Wall Structures, Structural Division, ASCE, (R.C. Murray, chmn.), 1994, 0-7844-0060-1, 196pp.

Structural Analysis of Pavements: State-of-the-Art, Yu T. Chou, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p958-963.

The Time Dependent Ray Method for Calculation of Wave Transformation on Water of Varying Depth and Current, Yung Y. Chao, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p671-679.

Ultimate Depth of Scour Around Bridge Piers, Sarfaraz A. Ansari and Alimul Qadar, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p51-55.

Unified Design of Horizontal Circular Curves, Said M. Easa, TE Jan./Feb. 93, p94-110.

Use of Database in Geo-environmental Engineering, Amin Rahman and Thomas J. Moynahan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1251-

The Use of SCADA for Real-time Calculation and Moni-toring for CT Compliance at the Ralph D. Bollman Water Treatment Plant, Peter Schoemann and Peter Martin, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2112-2123.

What is Computational Hydraulics? Angelos N. Findikakis, A. Blumberg, R. Schmalz and K. Bedford, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p482-486.

Computer aided drafting (CAD) 3D CAD Modeling and Graphical Simulation of Mobile Cranes, Parmanand V. Dharwadkar, James T. O'Connor and Thomas M. Gatton, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p539-546.

A+Prototypes: Concept for Individual Support in Tools for Building Design, Angelika Drach, Sandro Heitz and Markus Langenegger, CP Oct. 94, p489-506.

Applications of Artificial Intelligence Techniques to Component-Based Modular Building Design, C. Bridgewater and B. L. Atkin, CP Oct. 94, p469-488.

AutoCAD LT Overview, M. Kevin Parfitt, CC June 94,

Building Code of Australia Expert Assistant - Putting Re-search into Practice, Ron Sharpe, Stephen Oakes, Philip Haselden and Ian Davidson, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1679-1686.

CAD for Small Hydro Projects, Norman A. Bishop, Jr., CE

Apr. 94, p64-66.

CAD's Creavity Can't Substitute for Experience (ltr), CE May 94, p32

CAD-Based "Intelligent" Drawings: An Automated Quality Control Approach to Land Development, Charles McIntyre, Kevin Parfitt and Matt Syal, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p547-554.

CADD Utilities for the Structural Designer, Ranjit A. Sahair, CC Mar. 94, p1,2-5.

Checking of CAD Drawings for Fabrication Issues, Jay Ernst and W. M. Kim Roddis, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p248-253.

Computer-Aided Structural Engineering Software: The Status of Concurrent Engineering, Thomas E. Fenske, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p230-237.

Computer-Assisted Design of Hollow Concrete Masonry Bearing Walls, Kathleen M. Bradley and Terence A. Weigel, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1703-1710.

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1994), p1607-1614.

Construction Problem Solving in a Cooperative Distributed Agent Environment, Barry Jones and Mike Riley, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p79-87.

Construction Site Applications of CAD, John J. Mahoney and C. B. Tatum, CO Sept. 94, p617-631.

Creating Construction Documents from 3-D Computer

Models, Margaret T. Neggers, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1326-1331.

Database Use in the Engineering Office, Charles E. Bowl-

er, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p1874-1879.

ESPADD.BR: Expert System Producing Automated Designs and Drawings for Bridges, Charles Tung and Louis Berger, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p913-921. Exploration as a Basis of Creative Engineering Design,

John S. Gero, (Computing in Civil Engineering, Khalil

 Seto, (computing in Civil Engineering, Khaain
 Khozeimeh, ed., 1994), p1824-1831
 Extended Topology in Building Design Systems, Godfried Augenbroe and Wouter Rombouts, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1196-1203

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Graphic Visualization for Planning Heavy Lifts, Parmanand V. Dharwadkar, Koshy Varghese, James T. O'Connor and Thomas M. Gatton, (Computing in Civil

Engineering, Khalil Khozeimeh, ed., 1994), p759-766. A High Level and Real Time Integration Approach for CAD Systems, Mustafa Alshawi, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1779-

How to Organize CADD Systems (Part 1), CC Jan. 94, p10-11

How to Organize CADD Systems (Part 3), John Voeller, CC Apr. 94, p6-7.

Implementation of an Object-Oriented Knowledge Representation Scheme for the Development of an Intelligent CAD Interface, Nabil Kartam, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1772-1778.

Integrated Automation Systems in Structural Engineering, Song Fong Jan, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p1318-1325. An Integrated Computer Model for Project Schedule Updating, Walid Y. Thabet and Ayman A. Morad, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p743-750.

Integrated System Environment Using an Object-Oriented Project Model with Multiple-Views, Kenji Ito, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1204-1211.

Intelligent Construction Planning, A. Warszawski and O. Shaked, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p972-979. Interdiscipline Design Coordination Facilitated by CADD,

James W. Langston, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1983-1989. Modeling of a Knowledge-Based Object-Oriented CAD

System for Architectural and Structural Design, Undine Kunze, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1791-1797.

Multimedia Approach to Case-Based Structural Design, Mary Lou Maher and Bala Balachandran, CP July 94, p359-376.

Object Maps for Developing Automated Working Drawing Quality Control Procedures, M. Kevin Parfitt, (Comput ing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1787-1790.

Objects: the CADD/GIS Common Denominator, Paul Scar-poncini, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1764-1771

Overlaying Digital Images with 3-D CAD to Document as Built Construction, Karl A. Raynar and Gary R. Smith, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p751-758.

PC Networking - A Case Study, Chester J. Zaremba, (Computing in Civil Engineering, Khalil Khozeimeh, ed.,

1994), p1867-1873.

A Process-Oriented Planning and Control Model for Computer-Integrated Construction, Tarek M. Attia and Leonhard E. Bernold, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1756-1763.

Quality of Map Data in Geographic Information Systems, Gary A. Jeffress, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p221-224.

Real-Time Surveying System Heading for the Real World, ET Aug./Sept. 94, p1,4.

Setting up CADD Right, Susanna C. Smith, CC May 94,

p10-11. A Sketch is Worth a Thousand Rule Traces, Renate Fruchter, Mark J. Clayton, Helmut Krawinkler and Paul Teicholz, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1473-1480.

Small - Office CADD Implementation, M. Kevin Parfitt,

CC Apr. 94, p14-15.

Software Interface in Engineering Applications, Charles E. Bowler, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1880-1883.

Stake No More?, ET Dec. 94/Jan. 95, p11.

Steel Detailing Neutral File from Modeling Software, Gerardo Cisneros and J. A. Bohinsky, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p254-259.

Strengthening the Design/Construction Interface Using Electronic Imaging, Document Management and Work Flow Technologies, Jorge A. Vanegas, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p600-

A Symbol-form Mapping Framework for Conceptual Design Support, S. R. Gorti and D. Sriram, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1591-1598.

Use of Database in Geo-environmental Engineering, Amin Rahman and Thomas J. Moynahan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1251-1256.

Using CADD Application to Support Construction Activities, Annette L. Stumpf, Liang Y. Liu, Sangyoon Chin and Kenneth Ahn, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p531-538.

Utilizing Mathcad for Hydraulic Design of Stormwater Pump Stations, T. Chris Evensen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p814-821.

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What Do Project Managers (need to) Know About CADD? Stephen M. Benz, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1884-1891.

Computer aided instruction

Adaptive Instructor Model for an Engineering ITS, Nelson C. Baker and Chaisak Srisethanil, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1059-1066.

Application of OOP and GUI to the Development of Educational Software in Structural Mechanics, S. T. Mau and V. Aruna, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1273-1279.

BRICAL: A Multimedia Intelligent Educational System for Bridge Engineering, Amin Hammad and Yoshito Itoh, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1671-1678.

The BS8110 CAL Program for Teaching RC Design, B. S. Choo, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1663-1670.

Computer Model for Infiltration System Design, Thomas N. Debo, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p241-248.

Computer-Aided Laboratory Teaching in Geotechnics, I. E. G. Davey-Wilson, El Oct. 94, p430-435.

Computer-Assisted Instruction in Civil Engineering, Thomas Froese, Sundar Prasad, Jeff Friesen and Dan Zollman, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1647-1654.

A Computer-Integrated Approach to Teaching Engineering Mechanics, Shahram E. Zanganeh and Robert E. Efimba, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p1265-1272

Computing in Analysis and Design in Structural Engineering Education, Practice and Registration - A Rationale for Dialogue, Subhash C. Anand, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p357-361.

Computing in Civil Engineering, 2 vols., Khozeimeh, ed., 1994, 0-7844-0026-1, 2275pp. 2 vols., Khalil

Empirical Performance Comparison for Symbolic and Subsymbolic Learning Systems, Tomasz Arciszewski, Adam Borkowski, Tomasz Dybala, Janusz Racz and Piotr Wojan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1075-1082.

An Inductive Knowledge-Based System for Mitigation of Bridge Fabrication Errors, Srinath Nagaraja and Hani Melhem, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p1083-1090.

Machine learning Applications for Automated Constructa-bility Reviews, Kamolwan Lueprasert and Miroslaw J. Skibniewski, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p893-900.

A Machine Learning Decision Support System for Collab-orative Design, Nenad Ivezic and James H. Garrett, Jr., (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p901-908.

Machine Learning in Civil Engineering - Important Issues and Challenges, Benoît Julien, (Computing in Civil En-gineering, Khalil Khozeimeh, ed., 1994), p877-884.

Microworlds for Learning Through Inquiry, David McArthur, Matthew W. Lewis and Miriam Bishay, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p1067-1074.

Practical Solution of the Flexibility to Stiffness Transformation Problem With a Mathematical Assistant for the Personal Computer, Thomas A. Lenox and Ronald W. Welch, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1465-1472.

Scaling Up is Hard to Do: Experiences in Preparing a Case-Based Design Aid Prototype for Field Trial, Eric A. Domeshek, Craig M. Zimring and Janet L. Kolodner, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p430-437.

Simulating Learning Development for Construction, James D. Lutz, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1655-1662.

SteelDEM: An Interactive Multimedia Intelligent Tutor and Teaching Aid for Structural Steel Design, Abbas Aminmansour, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1458-1464.

Teaching Soil Mechanics Laboratories with Computer Assistance, William Whitaker, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1280-1285.

Towards Practical Machine Learning Techniques, Yoram Reich, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p885-892.

Using Knowledge Based Systems for Training the Young Engineer, James Crum and Michael Mulvihill, (Comput ing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1286-1293

Computer aided manufacturing

Application of Computer-Aided Structural Engineering, Tony Tascione, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p238-247.

Computer-Aided Structural Engineering Software: The Status of Concurrent Engineering, Thomas E. Fenske, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p230-237.

Integrated Building Design Systems in Context of Product Data Technology, Godfried Augenbroe, CP Oct. 94, p420-435.

Computer analysis

Automated Design of 3-D Highway Sign Bridge Structures, C. C. Fu, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p930-937. Automation Raises Lift Planning Out of Manuals, ET

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Buckling and Vibration Analysis of Laminated Panels
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and Melvin S. Anderson, AS July 59, pc.43-202.
Collapse Load Calculated by Probability Based Analysis
Compared to Full Scale Tower Test Results, Thien T.
Do, Michael D. Miller, Leon Kempner, Jr., Troy D.
Lyver and Wendelin H. Mueller, Ill., (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p48-59.

Computer Analysis No Substitute for Experience, CE Feb. 94, pl.

Computer Analysis of Continuous P/C Highway Bridge

omputer Analysis of Continuous P/C righway Bridge Girders with Variable Depth, Hani Melhem and Weiqun Zhang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p696-703. Computer Analysis of Lateral Loading in Wood-Framed Structures, R. Williams, (Computing in Civil Engineer-

ing, Khalil Khozeimeh, ed., 1994), p1513-1515 Computer Based Energy Analysis for Mechanical Retrofit of Buildings, Joseph Staib, Matt Syal and David Peters, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1349-1356.

The Computer is Not the Problem (ltr), CE May 94, p32-33

Computing in Analysis and Design in Structural Engineering Education, Practice and Registration: A View from the National Council of Examiners for Engineering and Surveying, J. Earl Herndon, Jr., (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p377-385.

Engineers: Follow Tedesko's Lead (ltr), CE May 94, p32. Expert System Bridges Inspection Information Gap, ET

Apr./May 94, p8-9.

Finite Element Algorithms for Modelling Flood Propaga-tion, J. -M. Hervouet and J. -M. Janin, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p102-113.

General Structure Representation for Neural Networks, George C. Lee and Mohamed F. Elkordy, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p47-56. Georgia Dome Cable Roof Construction Techniques, Wes-

ley R. Terry, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p563-572.

Microcomputer-Aided Analysis and Design of Spandrel Concrete Beams Subjected to Combined Bending and Torsional Loads, Nadar Ghafoori and Jeffrey Bucholc, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1711-1718.

New Technology in Coastal Wave Monitoring, Richard Seymour, David Castel, David McGehee, Juliana Thomas and William O'Reilly, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p105-123.

Real-World Reading (ltr), CE May 94, p32.

Simulation of Blast Pressure on Flexible Panels, Avinash C. Singhal, Debra Larson, Sanjay Govil and Vikram Karmakar, ST July 94, p2011-2020.

A Technique to Perform Coupled Consolidation Analysis Using Two Independent Softwares, Jichun Sun, Harianto Rahardjo and Delwyn G. Fredlund, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p849-856.

A Thousand Points of Data, William Ronald Woods and Daniel Steven Krasno, CE June 94, p54-56.

Computer applications

3D Simulation of End-Plate Bolted Connections, Archibald N. Sherbourne and Mohammed R. Bahaari, ST Nov. 94, p3122-3136.

Advanced Uses of Pen Computers in Building Inspection, Raja R. A. Issa, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1454-1457. Algorithm for Siphon-operated LPD Sewage Manifolds, Dennis L. Kaiser, (*Hydraulics of Pipelines*, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p424-438

The Application of Artificial Neural Networks to Civil Engineering, Ian Flood, Nabil Kartam and Tanit Tongthong, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p668-675.

Application of Fuzzy Logic in Civil Engineering in Japan, Hitoshi Furuta, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p1900-1907.

Application of Pen Computing to Construction Inspection, Jason M. Jazayeri, Farid Jazayeri and Katherine Litchfield. (Computing in Civil Engineering. Khalil Khozeimeh, ed., 1994), p1438-1445.

Applying Portable Computing and Hypermedia to Construction, Trefor P. Williams, ME May/June 94, p41-45. Aspects of Virtual Master Builder, Victor E. Sanvido,

Steven J. Fenves and John L. Wilson, EI July 92, p261-278

Bridge Rating Using Influence Surface for Curved Bridge Structures, C. C. Fu, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p688-695.

Bringing the Construction Foreman Into the Computer Age, Richard J. Coble, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1446-1453.

Building Groundwater Optimizers That Respond to the Needs of Decision-Makers, David E. Dougherty, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p347-350.

Building Product Model, A First Brick in Computer Integrated Construction, Michael J. Riley and Hamid H. R. Sabet, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p767-777.

Capturing As-built Project Information for Facility Management, L. Y. Liu, A. L. Stumpf, S. S. Kim and F. M. Zbinden, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p614-621.

Computer Applications in Liquefaction Analysis, Sivanuja S. Sundaram and K. K. Muraleetharan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p123-130.

Computer Applications in Structural Analysis and Design, J. A. Bohinsky and J. P. Lee, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p462-465.

Computer Automation and Project Organizational Impact: A Conceptual Model, Stuart Anderson and Suresh Ketha, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p498-501.

Computer Calculations Speed Tunnel-Lining Design, Gerhard Sauer, Vojtech Gall and Erich Bauer, CE June

94, p46-49.

Computer Implementation of Fuzzy Reasoning in Tender-ing, C. M. Tam, K. C. Lam and Albert T. P. So, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1357-1364.

Computer Software for Risk Analysis, Walter M. Grayman, (), p350-351.

Computer Use in Claims Analysis -- Roundtable Discussion, John R. Knoke, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2136-2139

Computer Use QA Documentation for Compliance with ISO-9000, Vyomesh Vora, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1812-1815.

Computer-Assisted Coal Mining - An Overview, George H. Schnakenberg, Jr., (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p427-436.

Computer-Based Risk Assessment of Competitive Procurement, Larry G. Crowley, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1540-1547.

Computer-Industry Heads Make the Case for 'EW', CE Aug. 94, p22.

Computer-Integrated Construction and CM Firms: A Profitable Combination, Ed Ott, Matt Syal and Gary Gehrig, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1751-1755.

Computerized Building Settlement Analyses for a Contam-inated Groundwater Remediation Project, James A. McKelvey, III. (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1228-1235.

A Computerized Methodology for Conducting Pedestrian Gap Studies, John Tipaldo, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2066-2072.

Computers are a Useful Tool (ltr), CE Apr. 94, p32. Computing in Civil Engineering, 2 vols., Khozeimeh, ed., 1994, 0-7844-0026-1, 2275pp.

Conceptual Models of Product, Project and Document Data; Essential Ingredients of CIC, Bo-Christer Björk, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p980-987.

Concurrent Genetic Algorithms for Optimization of Large Structures, Hojjat Adeli and Nai-Tsang Cheng, AS July

94, p276-296.

Conflict Management Using SHARED-DRIMS, Feniosky Peña-Mora, Duvvuru Sriram and Robert Logcher, (Com puting in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1599-1606.

Construction Process Innovation Through SMART System, Yusuke Yamazaki and Junichiro Maeda, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p1583-1590.

Construction Site Applications of CAD, John J. Mahoney and C. B. Tatum, CO Sept. 94, p617-631. Contractors Ride on Information Highway, CE July 94, p8.

Cost-Schedule Integration for Cash-Flow Forecasting Ronie Navon, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1536-1539.

Data Capture with GPS for Sewer Map Updates, John S. Gresh and Rodolfo B. Fernandez, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1615-1622.

Database Integration in Support of Construction Management, A. B. Cleveland, Jr. and J. F. Skolnick, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2054-2057.

Developing an Object Based Planning System for Precast Concrete Building Structures, John I. Messner, Victor E. Sanvido and Masaaki Ikeda, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1426-1429.

Developments in Risk Analysis Commercial Software, Charles Yoe, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p243-262.

EDI and Its Role in Information Management, G. Edward Gibson, Jr., Lansford C. Bell and Clarisse Molad, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1798-1805.

Effects of Design-Integrated Process Planning on Productivity in Rebar Placement, Md. Salim and Leonhard E.

Bernold, CO Dec. 94, p720-738.

Elastic Critical Loads for Plane Frames by Transfer Matrix Method, Stavros Syngellakis and Esmat S. Kameshki, ST Apr. 94, p1140-1157.

Electronic Yellow Pages for Pre-trip Planning Systems, Prasuna DVG Reddy, Ryuichi Kitamura and Paul P. Jovanis, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1516-1523.

Engineers Have Designs on Re-Engineering, ME Sept./ Oct. 94, p14.

Evolutionary Methods for Synthesis of Truss Topology, Fang Zhao, Sushil J. Louis and Mihaly Lenart, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1816-1823.

Experience is Not Bettering Pavement Designs (ltr), CE6-94, CE June 94, p35-36.

Expert System Bridges Inspection Information Gap, ET Apr./May 94, p8-9.

General Structure Representation for Neural Networks, George C. Lee and Mohamed F. Elkordy, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p47-56.

Hypertext and Claim Analysis, Geoffrey Bubbers and John Christian, CO Dec. 92, p716-730.

An Infrastructure Records Management System Using PCbased Image Scanning Technology, Stephen M. Benz, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1806-1811.

Integrating Computer Application for Pavement Management: A Case Study, Dimitri A. Grivas, B. Cameron Schultz and Richard Garrabrant, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1951-

Integrating Pen Computers with Other Keyless Data Sys tegrating Fen Computers with Other Reviews Data Sys-tems for Construction Applications, Richard J. Coble and Charles J. Kibert, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1639-1646.

Interactive Cost Estimating During Design, Robert I. Carr, Hyun-Soo Lee and Photios G. Ioannou, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1556-1563.

An International Knowledge Database for Ground Im-provement Geo-Systems, C. John Yoon, Theva The-vanagayam and Ilan Juran, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p277-284.

Large-scale Modeling of a Water-Distribution System, Christopher T. Stern, CC May 94, p1-7. Let's Go to the Videotape, Paul Tarricone, CE June 94,

p42-45.

Management Information System Application on a Multi-Million Overseas Project, Gamil F. Fanous and Mufid F. Samara, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2157-2174.

MDA Planner: Interactive Planning Tool Using Product Models and Construction Methods, Adina Jägbeck, CP

Oct. 94, p536-554.

Mesh Generation for Estuarine Flow Modeling, Norman L. Jones and David R. Richards, WW Nov./Dec. 92, p599-614.

Metamodeling Approach for Approximating the Operating Characteristics of Series of G/G/1 Queues on Congested Waterways, Melody, D. M. Dai and Paul Schonfeld, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p490-497.

Microtasking, Macrotasking, and Autotasking for Structural Optimization, A. Saleh and H. Adeli, AS Apr. 94,

Mobile GIS Technologies, John Alexander, Jerry Merckel, Kirk Upthegrove and David Martini, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1623-1630.

Multicriteria Optimization in Engineering Design, Andrzej Ameljańczyk, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p318-325.

Multimedia Approach to Case-Based Structural Design, Mary Lou Maher and Bala Balachandran, CP July 94,

p359-376.

Multimedia Based System for Analyzing Production Or-ganizations, Hans C. Björnsson and Per Sagert, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1405-1411.

Multimedia Implications to Structural Engineering, Nelson C. Baker and Omar El Kordy, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p37-46.

Multimedia in Civil Engineering, Jorge A. Vanegas and Nelson C. Baker, CE May 94, p71-73.

Navigation of Autonomous Mobile Robots, Georges Blaha and Stephen R. Gerig, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p70-78.

Needed: Old-Time Engineering (ltr), CE Apr. 94, p33.

Neural Network for Gap Acceptance at Stop-Controlled Intersections, Prahlad D. Pant and Purushothaman Balakrishnan, TE May/June 94, p432-446.

Neural Networks in Civil Engineering. I: Principles and Understanding, Ian Flood and Nabil Kartam, CP Apr. 94, p131-148.

Neural Networks in Civil Engineering. II: Systems and Application, Ian Flood and Nabil Kartam, CP Apr. 94, p149-162.

A New Automated System for Decision Support in the Construction Industry, M. J. Riley and C. J. Pickering, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p523-530.

A New Laboratory for Teaching Structural Engineering, Richard A. Behr and David S. Vollenweider, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p321-326.

Nonlinear Analysis of Structural Frameworks Using Super-computing Techniques, Christopher M. Foley and Sriramulu Vinnakota, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2058-2065. Numerical Modeling of Initial Ground Movement in an In-

strumented Superconducting Super Collider Shaft, David B. Spires, Fei Duan and Marek Mrugala, (Computing in Civil Engineering, Khalil Khozeimeh, ed.,

 pating in Cvit Engineering, Khaili Khozelmen, ed., 1994), p1990-1996.
 Optimal Markup Policy in Sequential Competitive Bidding, Hongbin (Ben) Chen, Robert I. Carr and Photios G. Ioannou, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1548-1555.

Pen Computers in Civil Engineering, Don M. Newell, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1631-1638.

Performance Parameters for Pseudodynamic Tests, Chris Thewalt and Mauricio Roman, ST Sept. 94, p2768-2781. Predicting Changes in Construction Cost Indexes Using Neural Networks, Trefor P. Williams, CO June 94,

p306-320.

A Probability Based Approach to the Design and Operation of Soil Vapor Extraction Systems, Kenneth K. Kebbell and William F. McTernan, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p564-571.

Progression of Computer Applications in Water Supply and Distribution Systems, Chun-Hou Orr, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p622-

Ouick Checks for Structural Computer Analysis, Brian Brenner, Cindy Gagnon and C. K. Shah, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), n2073-2080

RATAS Project-Developing an Infrastructure for Computer-Integrated Construction, Bo-Christer Björk, CP Oct. 94, p401-419.

Risk Simulation Model for Rehabilitation Studies, Richard Males, David Moser, Michael Walsh, Walter Grayman and Craig Strus, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p274-279.

Risk-Based Management of Uncertainty During Project Planning and Execution, Angel L. Rivera and Juan J. Ferrada, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p384-389.

Role of Advanced Computer Technology in Construction Industry, Roger M. Henry, CP July 94, p385-389.

Seismic Evaluation of the Macy Street Bridge, Los Angeles, California, Using 3-D Nonlinear Pushover Methodologies, John C. Castro and Jason S. Maxwell, (Comput ing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1099-1105.

Shear Effects on the Static Behaviour of Stiffened Pierced Walls, B. S. Choo and G. Q. Li, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1719-1726. Simple Procedure for Identifying Pavement Distresses from

Video Images, Koon Meng Chua and Ling Xu, TE May/June 94, p412-431.

Slenderness K factor for Leaning Columns, J. Dario Aris-tizabal-Ochoa, ST Oct. 94, p2977-2991.

transar-oction, \$1 Oct. 94, p2917-2991.

Startplan: Producing Schedule Templates Using IRMA,
Thomas Froese and Qiang Kevin Yu, (Computing in
Civil Engineering, Khalil Khozeimeh, ed., 1994), p63-

Structural Shape Analysis under the Prescribed Displacement Mode, Yasuhiko Hangai and Kazuaki Harada, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p694-703.

Studying Route Choice Behavior Using Computer-Aided Telephone Interviews and GIS, Mohamed A. Abdel-Aty, Ryuichi Kitamura, Paul P. Jovanis, Prasuna Reddy and Kenneth M. Vaughn, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1343-1348.

Technology Framework for Computer-Integrated Construction, Paul Teicholz and Martin Fischer, CC Feb. 94,

p1,9-11.

A Thousand Points of Data, William Ronald Woods and Daniel Steven Krasno, CE June 94, p54-56.

Three Dimensional Simulation of Progressive Tunneling Process for Lining Design of Intersecting Tunnels in Soft Rock, Liqiu (Lichu) Guan, Steven H. Baldauf and Wern-Ping (Nick) Chen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2006-2013.

Ing., Khaili Khozeiliei, ed., 1974), passor 2013.

To Boldly Go...On Line, CC May 94, p8-9.

Transactional Support for Concurrent Finite Element Analysis & Design, Sanjai Tiwari and H. R. Riggs, (Computational Computations). ing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p798-805.

Uncertainty versus Computer Response Time, William D. Rowe, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eu-

gene L. Stakhiv, ed., 1994), p263-273.

Unified Formulation for Analysis of Slopes with General Slip Surface, R. D. Espinoza, P. L. Bourdeau and B.

Muhunthan, GT July 94, p1185-1204.

Voice Operated Information System (VOIS) for Electronic Pages Information System, Prasuna DVG Reddy, Ryuichi Kitamura and Paul P. Jovanis, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1524-1531.

What is Computational Hydraulics? Angelos N. Findikakis, A. Blumberg, R. Schmalz and K. Bedford, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R.

Rumer, ed., 1994), p482-486.

Computer equipment
No Surprise: ASCE Members are Highly Computer-Literate, CE Sept. 94, p79.

Rugged Computer to Aid Bridge Inspection, CE Sept. 94,

U.S. Should Make Commitment to Community Colleges (ltr), CE July 94, p30.

Computer graphics 3D CAD Modeling and Graphical Simulation of Mobile Cranes, Parmanand V. Dharwadkar, James T. O'Connor and Thomas M. Gatton, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p539-546.

Application of OOP and GUI to the Development of Educational Software in Structural Mechanics, S. T. Mau and V. Aruna, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p1273-1279.

Application of Virtual Reality to Space Robotics Operations, David A. Read, Ken J. Ruta and Bradley N. Bell, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p19-27.

Automatic, Remote, Multiplexed Geotechnical Measurements with Time Domain Reflectometry (TDR), Charles H. Dowding and Fei-chiu Huang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1220-1227.

Computer-Assisted Design of Hollow Concrete Masonry Bearing Walls, Kathleen M. Bradley and Terence A. Weigel, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1703-1710.

Computerized Facility Information Management Systems, Mike Tidwell and Cal Leckington, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p396-401.

DETMOD: A Desktop Estuarine Transport MODel, David G. Kleinschmidt and Bryan R. Pearce, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1032-1038.

Graphic Visualization for Planning Heavy Lifts, Parmanand V. Dharwadkar, Koshy Varghese, James T. O'Connor and Thomas M. Gatton, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p759-766.

Integrated Automation Systems in Structural Engineerin Song Fong Jan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1318-1325.

Integrating Computer Applications for Traffic Data Analysis, Patricia B. Noyes and Pete d'Oronzio, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1339-1342.

Multimedia Implications to Structural Engineering, Nelson C. Baker and Omar El Kordy, (Analysis and Computa-tion, Franklin Y. Cheng, ed., 1994), p37-46.

Multimedia Technology and Structural Steel Design, Ab bas Aminmansour, (Structures Congress XII, N. Baker, ed. and Barry J. Loodno, ed., 1994), p315-320.

An Object-Oriented Approach to PC Finite-Element Solutions, Robert J. Lang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1236-1243.

Objects: the CADD/GIS Common Denominator, Paul Scarponcini, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1764-1771.

Overlaying Digital Images with 3-D CAD to Document as Built Construction, Karl A. Raynar and Gary R. Smith, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p751-758.

A Real-Time Graphical Interface to a Two-Dimensional Groundwater Flow and Mass Transport Model, Robert C. Speake, Jr. and Kay S. Capps, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2081-

The Role of Computer Graphics in Teleoperation, Antal K. Bejczy, Won-Soo Kim and Paul S. Schenker, (Robotics

for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p1-9.

A Sketch is Worth a Thousand Rule Traces, Renate Fruchter, Mark J. Clayton, Helmut Krawinkler and Paul Teicholz, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1473-1480. Start-ups, CE Feb. 94, p8.

Three Graphics Presentation Packages You Can Count On,

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Computer hardware

The Application of Artificial Neural Networks to Civil Engineering, Ian Flood, Nabil Kartam and Tanit Tongthong, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p668-675.

Application of Computer-Aided Structural Engineering, Tony Tascione, (Analysis and Computation, Franklin Y.

Cheng, ed., 1994), p238-247. A Computer-Integrated Approach to Teaching Engineering Mechanics, Shahram E. Zanganeh and Robert E. Efimba, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1265-1272.

Depth-Averaged Flow Model in Curvilinear Coordinates, Hector R. Bravo, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

p517-521.

A Framework for Collaborative Distributed Facility Engineering, Taha Khedro, Michael R. Genesereth and Paul M. Teicholz, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1489-1496.

Information Modeling and Applications, Victor E. Sanvi-do, Kirby A. Kuntz, Theodore D. Lynch, John I. Messner and David R. Riley, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p786-789.

An Interactive Computer Code for Generations of Artificial Earthquake Records, D. L. Karabalis, G. J. Cokkinides, D. C. Rizos, J. S. Mulliken and R. Chen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1115-1122.

Keeping Up With Computers, Charles S. Hodge, CE June 94, p70-72.

Multimedia Technologies for Civil and Construction Engineering Professional Practice, Jorge A. Vanegas and Gary Smith, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p592-599.

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Quality of Map Data in Geographic Information Systems,

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Computer languages

Explorations in Geodesic Forms, Dimitra Tzourmakliotou, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p440-449

Integrated Product Models, Charles M. Eastman, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p1188-1195.

Linguistic Analysis of Risk in Project Planning, Roozbeh Kangari and Moataz Bakheet, (Computing in Civil Engi-neering, Khalil Khozeimeh, ed., 1994), p216-219. The MOUSE Uncertainty Analysis System, Albert J. Klee,

(Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p372-379.

Computer models

Adaptive Instructor Model for an Engineering ITS, Nelson C. Baker and Chaisak Srisethanil, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1059-

Advances and Challenges in Case Based Design, Gerhard Schmitt, Simon F. Bailey and Ian F. C. Smith, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p301-309

Analysis and Computation of Old Truss Bridges, Beile Yin, (Dynamic Response and Progressive Failure Special Structures, Ramesh B. Malla, 1993), p32-47.

Application of Heavy Duty Roadheaders for Underground Development of the Yucca Mountain Exploratory Study Facility, Jamal Rostami, Levent Ozdemir and David M. Neil, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p395-402

Assessment of Risk of Thermal Cracking in Hardening Concrete, Mats Emborg and Stig Bernander, ST Oct. 94,

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Building Product Model, A First Brick in Computer Integrated Construction, Michael J. Riley and Hamid H. R. Sabet, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p767-777.

Calibration of a Highway Traffic Assignment Model for the Manhattan Central Business District, V. Papayannoulis, J. C. Falcocchio and L. Maynus, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p720-

Command Area Water Demands. I: Validation and Calibration of UCA Model, Seigo Yamashita and Wynn R. Walker, IR Nov./Dec. 94, p1025-1042.

Command Area Water Demands. II: Water-Demand Func-tion, Seigo Yamashita and Wynn R. Walker, IR Nov./ Dec. 94, p1043-1055.

Coupled of Thermal-Mechanical-Hydrological Analysis of a Fractured Rock Mass, M. P. Ahola, A. H. Chowdhury, S. M. Hsiung and J. Philip, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2492-2499.

Computer Automation and Project Organizational Impact: A Conceptual Model, Stuart Anderson and Suresh Ketha, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p498-501.

Computer Model for Infiltration System Design, Thomas N. Debo, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p241-248.

Computer Model Pointing to Dynamic Instability of Lift Slab Structure, Rusk Masih, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1832-1838

Computer Modelling of Comminuting Granular Media, H. Alehossein and H.-B. Mühlhaus, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p660-667.

Computing Two Dimensional Flood Propagation with a High Resolution Extension of McCormack's Method, F. Alcrudo and P. García Navarro, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p3-17.

Conceptual Design Using Evolutive-Cognitive Computing Techniques, Donald E. Grierson, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2183-

Conceptual Models of Product, Project and Document Data; Essential Ingredients of CIC, Bo-Christer Björk, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p980-987.

Creating Construction Documents from 3-D Computer Models, Margaret T. Neggers, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1326-1331.

Denver International Airport Tensile Roof Case Study: The Fabrication and Construction Process, Martin L. Brown, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p969-978.

Design Aids for Reinforced Concrete Columns, Bao-Jun Sun and Zhi-Tao Lu, ST Nov. 92, p2986-2995.

Design and Analysis of the 712 Fifth Avenue Structure, Louis A. Occhicone and Stanley Wojnowski, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1556-1561.

Design of Agricultural Drainage with Adaptive Irrigation Management, Luis A. Garcia, Kenneth M. Strzepek and Terence H. Podmore, IR Jan./Feb. 94, p179-194.

Developments to the IRMA Model of AEC Projects, Thomas Froese, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p778-785.

Diaphragm Action of Cladding in Low-Rise Metal Buildings, Bala Sockalingam, David Montgomery, Scott Schiff and Peter Sparks, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1048-1053.

DREDGMAP: A PC Based System to Predict the Fate of REDUMAP: A PC Based System to Predict the Fate of Dredged Material, J. Craig Swanson, Malcolm L. Spaulding and Tatsusaburo Isaji, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p200-209.

Elmhurst Quarry Flood Control Project, Anthony J. Charl-ton, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p107-110.

Extended Topology in Building Design Systems, Godfried Augenbroe and Wouter Rombouts, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1196-

1203.

Extensions of Finite Element Dental Stress Analysis, Robert E. Efimba and E. M. Ahmed, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1928-

A Formal Product/Process Model for Engineering, Albert Wong and D. Sriram, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1481-1488.

GIS Modeling of Neo-Traditional Neighborhood Development, John R. Stone, Thomas H. Wittmann and Jonathan L. Boone, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1131-1138.

Gully Erosion Minimization on Reclaimed Surface Mines Using SSAST Computer Model, Rose A. McKenney and Thomas W. Gardner, IR Sept./Oct. 94, p910-924.

Hybrid Finite Element/Discrete Element Model for Large Deformation Geotechnical Engineering Problems, Isao Ishibashi, Tarun K. Agarwal and You Wang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p857-864.

Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994, 0-7844-0024-5, 502pp.

Impulse Effect on Redundancy of a Tied-Arch Bridge, Leon L-Y. Lai, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p712-719.

An Integrated Computer Model for Project Schedule Updating, Walid Y. Thabet and Ayman A. Morad, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p743-750.

Integrated Product Models, Charles M. Eastman, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1188-1195.

Integrated System Environment Using an Object-Oriented Project Model with Multiple-Views, Kenji Ito, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

Integration of Water Rights and Network Flow Modeling in the Upper Snake River Basin, Donald K. Frevert, John W. Labadie, Roger K. Larson and Nancy L. Parker, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p577.

Interactive Decision Support System for Building Con-struction Scheduling, K. E. E. Kähkönen, CP Oct. 94,

An Interagency Overview of Selected Stream Sedimenta-tion Models, Shou-shan Fan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1166-1170.

IPA Phase 2 Sensitivity and Uncertainty Analysis, Virginia Colten-Bradley, Richard Codell and M. Rose Byrne, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1480-1491.

Issues and Experiences in Developing Shared Object Models, D. H. Douglas Phan and H. Craig Howard, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p584-591.

Knowledge Issues in Modeling, Hossam El-Bibany, (Computing in Civil Engineering, Khalil Khozeimeh, ed.,

1994), p579-583.

A Machine Learning Decision Support System for Collab-orative Design, Nenad Ivezic and James H. Garrett, Jr., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p901-908.

Macroelement Model for Shear Wall Analysis, Jerome M. James and Sashi K. Kunnath, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1505-1512.

MDA Planner: Interactive Planning Tool Using Product Models and Construction Methods, Adina Jägbeck, CP Oct. 94, p536-554.

Measuring Water in Trapezoidal Canals, Zohrab Samani and Henry Magallanez, IR Jan./Feb. 93, p181-186.

Mechanistic Model of the Creep-Rupture Process in Fila-mentary Composites, Kerry T. Slattery, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p215-222

Missouri River Economic Impacts Model, Charles Hiller-son and Ronald Roberts, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p637-640.

Model of an Upgrade, Bruce Gall and Alan A. Smith, CE July 94, p60-62.

Modeling Initial Mixing of Ocean Wastewater Discharges to Develop Toxic Effluent Limitations, Christopher C Obropta and Scott T. Taylor, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1047-1054.

Modeling Operational Activities in Object-Oriented Simulation, Amr A. Oloufa, CP Jan. 93, p94-106.

Modeling to Generate Alternatives in Discrete Structural Optimization, John W. Baugh, Jr., E. Downey Brill, Jr. and Shannon C. Caldwell, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p310-317.

Modelling Large-Scale Coast Evolution, Zbigniew Pruszak and Ryszard B. Zeidler, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p446-461.

Multi-Objective Optimization of Construction Schedules, Tadeusz Kasprowicz, (Computing in Civil Engineering,

Khalil Khozeimeh, ed., 1994), p185-190.

Nearshore Breaking Waves: A Numerical Model, Scott L. Douglass and Juan C. Ortiz, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p864-879.

Numerical Modeling of Salt Transport at a Solid Waste Disposal Site Capped With Coastal Dredged Material, Ram Krishnamohan, John B. Herbich and Fred S. Williams, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1152-1161.

The Numerical Simulation of Wetting and drying Areas using Riemann Solvers, G. W. Tchamen and R. Kahawita, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994),

p127-140.

Object-Oriented Finite Volume Dam-Break Model, Bochra Ech-Cherif El Kettani and Driss Ouazar, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p186-196.

Object-Oriented Process Modeling to Support Cooperative Planning in Industrialized Building Construction Pro-ject, Yusuke Yamazaki, (Computing in Civil Engineer-ing, Khalil Khozeimeh, ed., 1994), p998-1005.

Overflow Elimination Benefits from GIS Based Technology, Rod Thornhill, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p829-835.

Passenger-Terminal Simulation Model, José Reynaldo Setti and Bruce G. Hutchinson, TE July/Aug. 94, p517-535.

Performance Evaluation of Offshore Breakwaters a Field and Computational Study, Andrew J. Chadwick, Chris-toper Fleming, Jonathan Simm and Geoffrey N. Bullock, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p950-961.

Personal Computer Model to Evaluate Performance of Construction Systems/Services, Dean T. Kashiwagi, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p502-506.

Planning for Power Outages, ET June/July 94, p10.

Precedents in Design: A Computational Model for the Or-ganization of Case Knowledge, Rivka Oxman, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p438-445.

Prediction of Ground Deformations Due to Excavation-Application to Tunnel Lining Design in Weak Rock, Wern-ping Chen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1997-2005.

PROSIM - A Water Rights-Based Operational Simulation Model of the Provo River, Steven M. Thurin, Paul C. Summers and P. Kirt Carpenter, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p578-581.

Prototype Applications of Integrated Data Models in Con-struction, M. Betts, P. Brandon, T. Child, G. Cooper and J. Kirkham, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p988-991.

Rotating Crack Model and Fracture in a R/C Medium, Azadeh Parvin and Theodore G. Toridis, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1944-1950.

Sediment Dispersion and Footprint Modeling Initial Char-acterization at a Deep Disposal Site, Albert Mills Soldate, Jr. and Kim A. Brown, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p103-110.

Shear Effects on the Free Vibrations of Coupled Shear Walls, G. Q. Li and B. S. Choo, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1727-1734.

Sketch is Worth a Thousand Rule Traces, Renate Fruchter, Mark J. Clayton, Helmut Krawinkler and Paul Teicholz, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1473-1480.

A Speed Prediction Model for New Zealand Highways, Christopher R. Bennett and Roger C. M. Dunn, (Com-puting in Civil Engineering, Khalil Khozeimeh, ed.,

1994), p728-734.

Stochastic Analysis of Unsaturated Flow and Transport With the Suflat Executive Numerical Code, Amvrossios C. Bagtzoglou, M. Rashidul Islam and Michael Muller, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2669-2677.

Strategy for Computer Integrated Construction Technology, Paul Teicholz and Martin Fischer, CO Mar. 94,

p117-131.

Structural Character of the Northern Segment of the Paintbrush Canyon Fault, Yucca Mountain, Nevada, Robert P. Dickerson and Richard W. Spengler, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2367-2372.

Study of Stress Concentrations at the Intersection of Underground Chambers for the Superconducting Super Collider Project, Fwu-Ding (Kim) Lin, Lichu Guan and Steven Baldauf, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1975-1982.

Three-dimensional Modeling for Improving Construction Process Performance, Amarjit Singh, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1156-1163.

Time-Space Tradeoff Strategies for Space-Schedule Construction, Pierrette P. Zouein and Iris D. Tommelein, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1180-1187.

Traffic Safety Research: Database Issues and Analysis Techniques, Yusuf M. Mohamedshah and Charles C. Liu, (Computing in Civil Engineering, Khalil Liu, (Computing in Civil Ex. Khozeimeh, ed., 1994), p1846-1853.

Using GIS to Develop 2-D Hydraulic Models, Craig R. Wilkening, Lynn E. Johnson and Joel Herr, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p136-140.

A Value Chain Model to Support Business Process Reengineering in Turnkey Contracting Firm, K. C. Choi, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1575-1582.

Computer networks

General Structure Representation for Neural Networks, George C. Lee and Mohamed F. Elkordy, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p47-56.

On the Net, CE Oct. 94, p8.

PC Networking - A Case Study, Chester J. Zaremba, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1867-1873.

A Real-Time Control Network for Robotic Mining, William H. Schiffbauer, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p437-447.

To Boldly Go...On Line, CC May 94, p8-9.

Computer programming

Application of OOP in Developing Finite Element Analysis Programs Using C++, Jianing Ju and M. U. Hosain, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1916-1919.

Comparing Two OODBMSs: An Application Developer's Perspective, Nancy K. Wiegand and Teresa M. Adams, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p1412-1418.

Computer Aided Design in Civil Engineering Based Upon the OODBMS ONTOS, Karlheinz Lehner and Dietrich Hartmann, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1419-1425.

Construction Kit for Visual Programming of River-Basin Models, René F. Reitsma, Andrew M. Sautins and Stephen C. Wehrend, CP July 94, p378-384.

Direct and Modal Analyses for Shape-Finding of Unstable Structures, Tetsuyuki Tanami and Yasuhiko Hangai, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p714-723.

A Formal Product/Process Model for Engineering, Albert Wong and D. Sriram, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1481-1488.

Formal Specification of AEC Product Models, Harpreet S. Chadha, John W. Baugh, Jr. and Jeannette M. Wing, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p571-578.

General Structure Representation for Neural Networks, George C. Lee and Mohamed F. Elkordy, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p47-56.

An Information Engineering Approach for Environmental Impact Assessment and Monitoring Program, Chun-Hou Orr and Shu-Fang Peng, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p249-256.

Integrated System Environment Using an Object-Oriented Project Model with Multiple-Views, Kenji Ito, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1204-1211.

Issues and Experiences in Developing Shared Object Models, D. H. Douglas Phan and H. Craig Howard, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p584-591.

Modeling Engineering Design Information: An Object-Centered Approach, M. Maher Hakim and James H. Gar-rett, Jr., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p563-570.

The MOUSE Uncertainty Analysis System, Albert J. Klee, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p372-379.

Multi-Reservoir System Simulation Design Using C++ and Object Oriented Programming, Jesse Perla and K. Pon-nambalam, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1030-1034.

An Object Oriented Highway Information System in the Client-Server Environment, Kelvin C. P. Wang and John P. Zaniewski, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1959-1966.

An Object-Oriented Approach for Reinforced Concrete Design, Ajay B. Kulkarni and Kamal B. Rojiani, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p161-168.

An Object-Oriented Approach to PC Finite-Element Solutions, Robert J. Lang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1236-1243. An Object-Oriented Scheduling Data Acquisition Model Using a Hybrid Expert System, Kyungrai Kim, Calin M. Popescu and Gary D. Hamilton, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p356-361.

Object-Oriented Structural Analysis with Substructures, Richard Sause and Jun Song, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p153-160.

Planning, Assessing and Implementing Diagnostic Rehabil-itation Options, B. Jay Schrock, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p101-110.

The Safety Advisor: An Interactive Object-Oriented Program for Assessing the Safeness of Roadway and Roadside Designs, Malcolm H. Ray, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p341-348.

Simplified Simulation Model Development for Construction Projects, Amr A. Oloufa, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p362-367

SQP Methods for Inverse Airfoil Design, Carlos Orozco and Omar Ghattas, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p297-306.

Value Engineering Software, ET Apr./May 94, p11.

Computer programming languages

Knowledge Representation and Processing in Relational Data Base, Teresa M. Adams, CP Apr. 93, p238-255.

Linguistic Analysis of Risk in Project Planning, Roozbeh Kangari and Moataz Bakheet, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p216-219.

program for the Analysis of Pile Load Tests, Rajesh Subramanian and Reda M. Bakeer, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p644-651.

State and Resource Based Construction Process Simula tion, Julio Martinez, Photios G. Ioannou and Robert I. Carr, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p177-184.

Computer programs

Analysis and Design of Sprinkler Irrigation Laterals, Helmi M. Hathoot, Hussein M. Abo-Ghobar, Ahmed I. Al-Amoud and Fawzi S. Mohammad, IR May/June 94, p534-549.

Application of OOP in Developing Finite Element Analysis Programs Using C++, Jianing Ju and M. U. Hosain, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1916-1919.

An Assessment of the Joint Factor as Used in the Modified MEXE Method, N. G. Gong and B. S. Choo, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p704-711

Automated Design of 3-D Highway Sign Bridge Structures, C. C. Fu, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p930-937.

An Auxiliary Ventilation Design Approach for the ESF Development at Yucca Mountain, P. Mousset-Jones and F. Calizaya, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p508-514.

Bridge Gets Analysis, Less Likely to Crack, CE July 94,

Bridge Rail Impact Forcing Functions, Barry T. Rosson and Ronald K. Faller, (Structures Congress XII, N. C.

Baker, ed. and Barry J. Loodno, ed., 1994), p91-96.

The BS8110 CAL Program for Teaching RC Design, B. S. Choo, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1663-1670.

Buckling and Vibration Analysis of Laminated Panels Using VICONOPT, David Kennedy, Fred W. Williams and Melvin S. Anderson, AS July 94, p245-262.

Calculation of 2D Flood Propagation Using the Program Package Floodsim, W. Bechteler, M. Nujic and A. J. Otto, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p257-267.

COAST Educational Program for Teaching Structural Analysis, Czeslaw J. Branicki and Jerzy W. Wekezer, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p327-332.

A Comprehensive Bridge Management System for Illinois, Allen R. Marshall, Todd Ahrens and Paul D. Thompson, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p1859-1866.

Computer Analysis of Continuous P/C Highway Bridge Girders with Variable Depth, Hani Melhem and Weiqun Zhang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p696-703.

Computer Applications in Liquefaction Analysis, Sivanuja S. Sundaram and K. K. Muraleetharan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p123-

Computer Applications in Structural Analysis and Design, J. A. Bohinsky and J. P. Lee, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p462-465. Computer Calculations Speed Tunnel-Lining Design, Gerhard Sauer, Vojtech Gall and Erich Bauer, CE June

94, p46-49.

Computer-Assisted Planning, Programming, Budgeting System (CAPPB), Bruce C. Goettel, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p390-395.

Design of a Network and Travel Simulator: A Tool Box for the Analysis of Route Choice Behavior in the Presence of Information, Kenneth M. Vaughn, Prasuna Reddy, Ryuichi Kitamura, Paul P. Jovanis and Mohamed A. Abdel-Aty, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1743-1750.

Developing Retrofit Strategies for the China Basin Viaduct Foundations Using Non-linear, Hysteretic Analysis, D. R. Parker, John C. Castro and R. A. Dameron, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p1839-1845.

Estimating Sediment Relative Density Using an Impact Core Sampler and Wave Equation-based Pile Analysis, James M. Schmidt and Donald E. Bruggers, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1212-1219.

FEM in a Design Code Environment, Philip V. DeSantis and James E. Wild, (Computing in Civil Engineering,

Khalil Khozeimeh, ed., 1994), p454-461.

Fitting Beta Distributions Based on Sample Data, Simaan M. AbouRizk, Daniel W. Halpin and James R. Wilson, CO June 94, p288-305.

A Flexible Structural Analysis Method for Computer-Aided Preliminary Design, Fang Zhao and Xiaogang Zeng, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p1294-1301.

A Framework for a Database of Construction Costs and Productivity at the Process Level for Transportation Infrastructure Development, Antonio A. González-Quevedo, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p1854-1858.

Hurricane Iniki, A Hindcast, Winds, Windwaves, Swells, Storm Surge, and Wave Run-Up, C. L. Bretschneider, J. D. Agrawal, N. C. Carmella and K. A. Wohlmut, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p772-781.

A Hypermedia Constructability System, Bob McCullouch and Bob Patty, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1397-1404.

Integrated Product Models, Charles M. Eastman, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

pl188-1195.

An Interactive Regional Regression Approach to Estimating Flood Quantiles, Gary D. Tasker and Raymond M. Slade, Jr., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p782-785.

Novel Design Algorithms for K Factor Calculation and Beam-Column Selection, N. Agbayani, P. Jayachandran and D. Sriram, ST Dec. 93, p3630-3648.

Practical Solution of the Flexibility to Stiffness Transformation Problem With a Mathematical Assistant for the Personal Computer, Thomas A. Lenox and Ronald W Welch, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1465-1472.

A program for the Analysis of Pile Load Tests, Rajesh Subramanian and Reda M. Bakeer, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p644-651.

PSF-PM Verification of 3D Free Surface Flow Models, Sam S. Y. Wang and F. Mauricio Toro-Botero, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p895-899.

Ouick Checks for Structural Computer Analysis, Brian Brenner, Cindy Gagnon and C. K. Shah, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p2073-2080.

Representation of Case Memory for Structural Design, Mary Lou Maher, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2030-2037.

Risk Simulation Model for Rehabilitation Studies, Richard Males, David Moser, Michael Walsh, Walter Grayman and Craig Strus, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p274-279.

Software Hits the Ceiling, CE Apr. 94, p8.

Stable Reinforced-Concrete Section-Analysis Procedure, C. R. Thewalt and B. Stojadinović, ST Oct. 94, p3012-

Structure Modelization Using Expert Elements 'Neural Stiffness Method', Ricardo Barrenechea, Fabián Calcagno and Guillermo Gulli, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p676-683.

TIGER and Census Bureau Data in a GIS: A Powerful Combination for Civil Engineers, Robert W. Marx, (Computing in Civil Engineering, Khalil Khozeimeh,

(Computing in Civil Engineering, Rhain Ribocanics, ed., 1994), p225-232.

Time-related Deflections of Cantilever Bridges, Cornelis van der Veen, Marcel van Vliet and Ane de Boer, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p922-929.

A User Friendly Microcomputer Program for Liquefaction Potential Analysis, A. H. Wu, J. S. Hsu and A. Urzua, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p843-848.

Using Computer Programs to Develop As-Built Schedules, Jason M. Jazayeri, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p191-196.

Wave Equation Parameters from Driven-Rod Test, Robert Y. Liang and Yuanjing Sheng, GT June 93, p1037-1057. Wet Detention Facility Pollutant Removal Modeling,
Thomas R. Sear and Herbert M. Raybourn, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p830-833.

Computer software

Accounting Software for Very Small Firms, CC Jan. 94, p1,6-8.

Accounting Software for Very Small Firms (Part 2), Todd

Salkovitz, CC Feb. 94, p14-15. Adaptive Instructor Model for an Engineering ITS, Nelson Baker and Chaisak Srisethanil, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1059-1066.

Application of Computer-Aided Structural Engineering, Tony Tascione, (Analysis and Computation, Franklin Y.

Cheng, ed., 1994), p238-247.

Application of OOP and GUI to the Development of Educational Software in Structural Mechanics, S. T. Mau and V. Aruna, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1273-1279.

Application of OOP in Developing Finite Element Analysis
Programs Using C++, Jianing Ju and M. U. Hosain,
(Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p1916-1919.

Application of Pen Computing to Construction Inspection, Jason M. Jazayeri, Farid Jazayeri and Katherine Litchfield, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1438-1445. Application of the FESWMS-2DH Software to Solve the

Navigation Problem at EL-Menya Bridge in Egypt, Khaled Kheireldin, Ahmed Fahmey and Mohamed Gas-ser, (Computing in Civil Engineering, Khalil ser, (Computing in Civil En Khozeimeh, ed., 1994), p1244-1250.

Application of WQMAP to Upper Narragansett Bay, Rhode Island, J. C. Swanson and D. L. Mendelsohn, (Es-tuarine and Coastal Modeling III, Malcolm L. Spaulci ing, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p656-678.

Applying Portable Computing and Hypermedia to Construction, Trefor P. Williams, ME May/June 94, p41-45.

ASA.WAVES: An Interactive PC-based Wave Forecasting Tool, Stéphan T. Grilli, T. Opishinski, M. L. Spaulding and T. Isaji, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p890-904.

AutoCAD LT Overview, M. Kevin Parfitt, CC June 94,

p14-16.

An Automated Environment for Parallel Computing, E. D. Sotelino, D. W. White and W. F. Chen, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p193-202.

Automatic, Remote, Multiplexed Geotechnical Measurements with Time Domain Reflectometry (TDR), Charles H. Dowding and Fei-chiu Huang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1220-1227.

Automation Raises Lift Planning Out of Manuals, ET

June/July 94, p9.

Bechtel Automated Lift Planning System, Craig Bennett and Steve Ditlinger, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed.,

1994), p401-409

Building Code of Australia Expert Assistant - Putting Research into Practice, Ron Sharpe, Stephen Oakes, Philip Haselden and Ian Davidson, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1679-1686.

CAD-Based "Intelligent" Drawings: An Automated Quality Control Approach to Land Development, Charles McIntyre, Kevin Parfitt and Matt Syal, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p547-554. CADD Utilities for the Structural Designer, Ranjit A.

Sahair, CC Mar. 94, p1,2-5.

CadVisor (CAD Equipment Analysis and Selection Sys-tem), Bruce C. Goettel, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2140-2144.

Case-Based Design in the SEED System, Ulrich Flemming, Robert Coyne and James Snyder, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p446-453.

Circle Integration, John Kunz, Mark Clayton and Martin Fischer, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p55-62.

Comparing Two OODBMSs: An Application Developer's Perspective, Nancy K. Wiegand and Teresa M. Adams, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1412-1418.

Computer Buying Guide for Engineering Students, J. K. Nelson, S. D. Schiff and D. A. Latimer, CC Apr. 94,

Computer Software for Risk Analysis, Walter M. Grayman, (), p350-351.

Computer Use QA Documentation for Compliance with ISO-9000, Vyomesh Vora, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1812-1815.

Computer-Aided Structural Engineering Software: The Status of Concurrent Engineering, Thomas E. Fenske, (Analysis and Computation, Franklin Y. Cheng, ed.,

1994), p230-237.

Computer-Assisted Instruction in Civil Engineering, Thomas Froese, Sundar Prasad, Jeff Friesen and Dan Zollman, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p1647-1654.

A Computer-Integrated Approach to Teaching Engineering Mechanics, Shahram E. Zanganeh and Robert E. Efimba, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1265-1272.

Construction Estimating Software, Marc T. Pritchard, Tim Culligan and Rick Kimble, CC Feb. 94, p1-6.

Creating Construction Documents from 3-D Computer Models, Margaret T. Neggers, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1326-1331.

Depth-Averaged Flow Model in Curvilinear Coordinates, Hector R. Bravo, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

Development of an Expert System for Daily Drought Monitoring, T. J. Chang, H. Zheng and X. A. Kleopa, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p630-639.

Developments in Risk Analysis Commercial Software, Charles Yoe, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p243-262.

ESPADD.BR: Expert System Producing Automated Designs and Drawings for Bridges, Charles Tung and Louis Berger, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p913-921.

Evaluation of Software for Analysis and Design of Reinforced Concrete Structures, Andrew D. Betaque and Kamal B. Rojiani, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p466-473.

An Experiment in Mobile Robotic Cooperation, Lynne E. Parker, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p131-

A Feature Based Path Planning System for Robotic Stencil-ing of Roadway Markings, H. Kochekali and B. Ravani, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p52-60.

A Framework for Collaborative Distributed Facility Engineering, Taha Khedro, Michael R. Genesereth and Paul M. Teicholz, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1489-1496.

GIS Modeling of Neo-Traditional Neighborhood Development, John R. Stone, Thomas H. Wittmann and Jonatha L. Boone, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1131-1138.

Good Software, and It's Free, Too, David Angelotti, CC

June 94, p1-6.

HEC River Analysis System (HEC-RAS), Vernon Bonner, Gary Brunner and Mark Jensen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p376-380.

Hydraulics and Hydrology for the User, Randel L. Dy-mond, CC May 94, p1,12-14.

Improved Hydraulic Features of the HEC River Analysis (HEC-RAS), Gary W. Brunner and Steven S. Piper, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p502-506.

An Integrated Approach To Repetitive Construction Plan-ning, Boliver A. Senior and Daniel W. Halpin, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p25-32.

Integrating Computer Applications for Traffic Data Analysis, Patricia B. Noyes and Pete d'Oronzio, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1339-1342.

Intentions and Credences - An Australian Approach to Computerised Building Regulation, Jane Blackmore, Frank Leong and Ron Sharpe, (Computing in Civil Engi-neering, Khalil Khozeimeh, ed., 1994), p131-136.

Keeping Up With Computers, Charles S. Hodge, CE June 94, p70-72.

MoveCapPlan: In Integrated System for Planning and Controlling Construction Material Laydown and Handling, I. D. Tommelein, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1172-1179.

Multimedia Implications to Structural Engineering, Nelson C. Baker and Omar El Kordy, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p37-46.

Multimedia Technologies for Civil and Construction Engineering Professional Practice, Jorge A. Vanegas and Gary Smith, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p592-599.

Multimedia Technology and Structural Steel Design, Ab-bas Aminmansour, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p315-320.

Nonlinear Collapse of Offshore Jacket Structures, Helen M. Bolt, Colin J. Billington and J. Keith Ward, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p19-24.

Nonlinear Decomposition of a 2-D Wave Field, Jun Zhang, R. E. Randall, L. Chen, C. A. Spell, J. K. Longridge and M. Ye, (*Ocean Wave Measurement and Analysis*, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p150-164.

Nonlinear Finite Element Analysis of RC Slab Bridge, Vikas Huria, Kuo-Liang Lee and A. Emin Aktan, ST Jan. 93, p88-107.

Numerical Modeling of Waves in Harbors, Edward F. Thompson, H. S. Chen and Lori L. Hadley, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p590-601. Object-Oriented Finite Volume Dam-Break Model, Bochra

Ech-Cherif El Kettani and Driss Ouazar, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p186-196.

Onika: A Multilevel Human-Machine Interface for Real-Time Sensor-Based Systems, Matthew W. Gertz and Pradeep K. Khosla, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed. and Paul R. Klarer, ed.,

1994), p28-36.

ODDBMS in AEC Software Development: The Highs and Lows of Developing a Commercial Application, Gary D. Hamilton, Lisa Bell, Wade Cohn, Francois Grobler and Kyungrai Kim, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1430-1437.

Pen Computing Can Streamline Site Inspections, ME

Pen Computing Can Susainth of the Computing Can Susainth State of the Computing Can Susainth State of the Canal Susainth State of the Canal Susainth State of the Computing Comp N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1082-1087

Probabilistic Modeling of Scheduling Uncertainty: Methods and Tools, Ali Touran, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p380-383.

A Process-Oriented Planning and Control Model for Com puter-Integrated Construction, Tarek M. Attia and Leonhard E. Bernold, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1756-1763.

Program Takes the Stress Out of Calculating, CE May 94,

Project Management Software: Putting It Through the Paces, Julie Hart, CC Jan. 94, p8-9.

Paces, Julie Hart, CC Jan. 94, ps-9.
Prototype to Product - Challenge and Frustrations, Ian F. C. Smith, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1695-1702.
Quality of Map Data in Geographic Information Systems, Gary A. Jeffress, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p221-224.

Real-Time Surveying System Heading for the Real World,

ET Aug/Sept. 94, p1,4. Refinement of Cost Estimates with Artificial Neural Nets, Irtishad U. Ahmad and Syed T. Rahman, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1373-1380.

SEASHELL - Software for the Simulation of Transport and EASTIELL - Software for the Simulation of Transport and Fate of Pollutants in Coastal Waters, Venkat S. Kolluru and Malcolm L. Spaulding, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p624-640.

Software Eases Contract Drafting, CC Feb. 94, p7-8. Software Expands User's Financial Data, CE Nov. 94, p86.

Software for marina anchoring design on chains or cables, Gilles Collin, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p398-405.

Software for Settlement Analysis, John T. Christian, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1718-1729.

Software Hits the Ceiling, CE Apr. 94, p8.

Software Interface in Engineering Applications, Charles E. Bowler, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1880-1883.

A Spectral Wave Model for the Coastal Zone, L. H. Hol-

A Spectral Wave Model for the Coastal Zone, L. H. Hothuisen, N. Booij and R. C. Ris, Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p630-641.
Standards Processing 2000, Dana J. Vanier, J. Russell Thomas and Jamie L. Worling, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p137-144.

Steel Detailing Neutral File from Modeling Software, Gerardo Cisneros and J. A. Bohinsky, (*Analysis and Computation*, Franklin Y. Cheng, ed., 1994), p254-259. SteelDEM: An Interactive Multimedia Intelligent Tutor

and Teaching Aid for Structural Steel Design, Abbas Aminmansour, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1458-1464. Still More Concerns, Worries, and Wringing of Hands, Charles S. Hodge, CC Mar. 94, p10-11

Streamlining Project Estimating and Scheduling, David Angelotti, CC Feb. 94, p11-13.

Teaching with Multimedia: Example and Issues, Rollin H. Hotchkiss, El July 94, p279-289.

A Technique to Perform Coupled Consolidation Analysis Using Two Independent Softwares, Jichun Sun, Harianto Rahardjo and Delwyn G. Fredlund, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p849-856.

Three Graphics Presentation Packages You Can Count On, M. Kevin Parfitt, CC Jan. 94, p1-5.

Timing Analysis of a Multiprocessor Architecture for Active Control, John W. Baugh, Jr. and Wael M. Elseaidy, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p203-212.

Transactional Support for Concurrent Finite Element Anal-ysis & Design, Sanjai Tiwari and H. R. Riggs, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p798-805.

Using Computer Programs to Develop As-Built Schedules, Jason M. Jazayeri, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p191-196.

Utilizing Mathcad for Hydraulic Design of Stormwater Pump Stations, T. Chris Evensen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p814-821.

"A New Way of Teaching Structural Engineering With the 'AN/EX' Mini-Laboratory", Richard A. Behr, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1571.

Computer storage devices

Case Storage of Planning Knowledge for Power Plant Construction, Ren-Jye Dzeng and Iris D. Tommelein, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p293-300.

Case-Based Design in the SEED System, Ulrich Flemming, Robert Coyne and James Snyder, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p446-453. Precedents in Design: A Computational Model for the Or-ganization of Case Knowledge, Rivka Oxman, (Comput-

ing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p438-445.

Representation of Case Memory for Structural Design, Mary Lou Maher, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2030-2037.

A Simplified Method of Multistory-frame Analysis Includ-ing the P-Δ Effect, Hani Melhem and Khalid Niazi, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1302-1309.

Computer systems programs Integrated Research for Civil Infrastructure Systems: A Fu-ture Challenge, S. C. Liu, K. P. Chong and M. P. Singh, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p1-13.

Integrating Computer Application for Pavement Management: A Case Study, Dimitri A. Grivas, B. Cameron Schultz and Richard Garrabrant, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1951-

Operating System Rundown, Charles S. Hodge, CC May 94, p14-15.

Computer techniques

Multimedia Implications to Structural Engineering, Nelson C. Baker and Omar El Kordy, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p37-46.

Computerization 100 Years of Data Not Enough (ltr), CE Aug. 94, p31-32. ASCE Board, in Atlanta, Gives Go-Ahead for Exploring Possibility of Electronic Textbook; Takes Further Steps for Headquarters Relocation, NE Dec. 94, p1,10.

The Bell Tolls...for Toll Collectors, CE Oct. 94, p8.
Can Computers 'Recession-Proof' Your Firm, ME Sept./

Oct. 94, p14-15.
Computer Benefits Can't be Measured by Productivity

Alone, ME May/June 94, p1-2. Computer-Industry Heads Make the Case for 'EW', CE Aug. 94, p22

Computers are Not Engineers (ltr), CE July 94, p29-30 Computers Can't Replace Intuition (ltr), CE Apr. 94, p28.

Firm Plugs in to Electronic Time Sheets, ME Nov./Dec. 94,

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Job Searching Goes High-Tech as ASCE Endorses Job Bank, CE June 94, p76.

MIS Links Personnel Projects, Proposals, ME Mar/Apr.

94, p3. New Solar Heating System, ET Oct./Nov. 94, p11.

Pen Computing Can Streamline Site Inspections, ME Nov./Dec. 94, p12.

The Three Ages of Engineering Calculations (ltr), CE Sept. 94, p30. Trash Collection Goes High-Tech, CE Aug. 94, p78.

Video-Based Data System Keeps Traffic Moving, ET Oct./ Nov. 94, p1,4-5.

Computerized control systems

Advancement of Material Handling Technologies for In-Place Asphalt Pavement Recycling, Sotiris A. Pagdadis and Ilan Ishai, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p365-373.

Computer Control of CSOs, Russell W. Batzell, CE Nov.

94, p58-59.

Computer-Controlled, Precision Pressure Standard, Othon K. Rediniotis, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p509-518.

Control Model for Robotic Backhoe Excavation and Obstacle Handling, Xiaodong Huang and Leonhard E. Bernold, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p123-130.

Experimental Study on Unsteady Flow in Open Channels with Flood Plains, A. Tominaga, M. Nagao and I. Nezu, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p396-405.

A Real-Time Control Network for Robotic Mining, William H. Schiffbauer, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed. and Paul R. Klarer, ed.,

1994), p437-447.

SCADA System Controls Combined Sewer Overflow Regulation System to Optimize Wastewater Collection, Russell W. Batzel, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p822-828.

Sewers and Computers, Rodolfo B. Fernandez and Brian W. Daniels, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p836-842.

Computerized design

3D CAD Modeling and Graphical Simulation of Mobile Cranes, Parmanand V. Dharwadkar, James T. O'Connor and Thomas M. Gatton, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p539-546. A+Prototypes: Concept for Individual Support in Tools for

Building Design, Angelika Drach, Sandro Heitz and Markus Langenegger, CP Oct. 94, p489-506.

Adaptability of Translation-Grid Shells, J. G. Oliva Salinas, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p133-141.

Advances and Challenges in Case Based Design, Gerhard Schmitt, Simon F. Bailey and Ian F. C. Smith, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p301-309.

Analysis of I-Girder Highway Bridges, Kassim M. Tarhini, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p684-687.

Application of Computer-Aided Structural Engineering, Tony Tascione, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p238-247.

Applications of Artificial Intelligence Techniques to Com-Applications of Artificial intelligence reclamages to com-ponent-Based Modular Building Design, C. Bridgewater and B. L. Atkin, CP Oct. 94, p469-488. AutoCAD LT Overview, M. Kevin Parfitt, CC June 94,

p14-16.

Automated Design of 3-D Highway Sign Bridge Structures, C. C. Fu, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p930-937.

Automatic Truss Design by Optimized Growth, William Keith Rule, ST Oct. 94, p3063-3070.

CAD for Small Hydro Projects, Norman A. Bishop, Jr., CE Apr. 94, p64-66.

CAD-Based "Intelligent" Drawings: An Automated Quality Control Approach to Land Development, Charles McIntyre, Kevin Parfitt and Matt Syal, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p547-554.

CADD Utilities for the Structural Designer, Ranjit A.

Sahair, CC Mar. 94, p1,2-5.

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CadVisor (CAD Equipment Analysis and Selection Sys-tem), Bruce C. Goettel, (Computing in Civil Engineer-ing, Khalil Khozeimeh, ed., 1994), p2140-2144.

Case-Based Design in the SEED System, Ulrich Flemming, Robert Coyne and James Snyder, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p446-453.

Case-Based Preliminary Building Design, Simon F. Bailey and Ian F. C. Smith, CP Oct. 94, p454-468. Checking of CAD Drawings for Fabrication Issues, Jay Ernst and W. M. Kim Roddis, (Analysis and Computa-tion, Franklin Y. Cheng, ed., 1994), p248-253.

Computer Aided Design in Civil Engineering Based Upon the OODBMS ONTOS, Karlheinz Lehner and Dietrich Hartmann, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1419-1425.

Computer Aided Design of Trickling Filters, Bruce E. Logan, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p678-685.

Computer-Aided Structural Engineering Software: The Status of Concurrent Engineering, Thomas E. Fenske, (Analysis and Computation, Franklin Y. Cheng, ed.,

1994), p230-237.

Computer-Assisted Design of Hollow Concrete Masonry Bearing Walls, Kathleen M. Bradley and Terence A. Weigel, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1703-1710.

A Computer-Integrated Approach to Teaching Engineering Mechanics, Shahram E. Zanganeh and Robert E. Efimba, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p1265-1272.

Computer-Integrated Construction, Bruce C. Coles and Kenneth F. Reinschmidt, CE June 94, p50-53. Computers Can't Replace Intuition (ltr), CE Apr. 94, p28.

Computing and Design in Structural Engineering A Practicing Engineer's Point of View, Richard A. Parmelee, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p369-376.

Computing in Analysis and Design in Structural Engineering Education, Practice and Registration - A Rationale for Dialogue, Subhash C. Anand, (Analysis and Computation, Franklin Y. Cheng, ed., 194), p357-361.

Computing in Analysis and Design in Structural Engineering Education, Practice and Registration: A View from the National Council of Examiners for Engineering and Surveying, J. Earl Herndon, Jr., (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p377-385. onstraint Management on Distributed

Management Constraint Configurations, Sanjai Tiwari and H. C. Howard, (Computing in Civil Engineering, Khalil Khozeimeh, ed.,

1994), p1607-1614.

Construction Problem Solving in a Cooperative Distributed Agent Environment, Barry Jones and Mike Riley, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p79-87.

Construction Site Applications of CAD, John J. Mahoney and C. B. Tatum, CO Sept. 94, p617-631.

Database Use in the Engineering Office, Charles E. Bowler, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1874-1879.

ESPADD.BR: Expert System Producing Automated Designs and Drawings for Bridges, Charles Tung and Louis Berger, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p913-921.

Exploration as a Basis of Creative Engineering Design,

John S. Gero, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1824-1831.

Extended Topology in Building Design Systems, Godfried Augenbroe and Wouter Rombouts, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1196-1203.

FEM in a Design Code Environment, Philip V. DeSantis and James E. Wild, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p454-461.

A Flexible Structural Analysis Method for Computer-Aided Preliminary Design, Fang Zhao and Xiaogang

Zeng, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1294-1301.

Formal Specification of AEC Product Models, Harpreet S. Chadha, John W. Baugh, Jr. and Jeannette M. Wing, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p571-578.

A Frame-Based Drawing Management System Based on Building Object Model, Gakuhito Hirasawa and Yusuke Yamazaki, (Compuing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p555-562.
GDE: New Approach to Graphical Modeling, M. Krzaczek, CP Jan. 94, p103-124.

Georgia Dome Cable Roof Construction Techniques, Wesley R. Terry, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p563-572.

Graphic Visualization for Planning Heavy Lifts, Parmanand V. Dharwadkar, Koshy Varghese, James T. O'Connor and Thomas M. Gatton, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p759-766.

A High Level and Real Time Integration Approach for CAD Systems, Mustafa Alshawi, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1779-

How to Organize CADD Systems (Part 1), CC Jan. 94,

p10-11

How to Organize CADD Systems (Part 3), John Voeller, CC Apr. 94, p6-7.

I.P.L. Space Trusses: Structural Performance and Analysis, M. Burt, D. Shriftailig, V. Babaev, A. Bogdanov and D. Beilin, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1075-1081

Implementation of an Object-Oriented Knowledge Representation Scheme for the Development of an Intelligent CAD Interface, Nabil Kartam, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1772-1778.

Integrated Automation Systems in Structural Engineering

Integrated Automaton Systems in Studentar Engineering, Song Fong Jan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1318-1325.
An Integrated Computer Model for Project Schedule Updating, Walid Y. Thabet and Ayman A. Morad, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1904), 3-74, 750.

1994), p743-750.
Integrated System Environment Using an Object-Oriented Project Model with Multiple-Views, Kenji Ito, (Comput-1994). ing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p1204-1211

Integration of Water Quantity and Quality Planning, Luiz G. Azevedo, Timothy K. Gates and Darrell G. Fontane, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p388-391

Intelligent Construction Planning, A. Warszawski and O. Shaked, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p972-979.

Interactive Design of Service Routes, Jin-Yuan Wang and Jeff R. Wright, TE Nov./Dec. 94, p897-913.

Interdiscipline Design Coordination Facilitated by CADD, James W. Langston, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1983-1989. Minimizing the Probable Maximum Flood, Mark A. Wood-

bury, Douglas T. Eberlein and Nicholas Pansic, CE June 94, p64-65.

Modeling Engineering Design Information: An Object-Centered Approach, M. Maher Hakim and James H. Garrett, Jr., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p563-570.

Modeling of a Knowledge-Based Object-Oriented CAD System for Architectural and Structural Design, Undine Kunze, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1791-1797.

Objects: the CADD/GIS Common Denominator, Paul Scart-

poncini, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1764-1771.

Overlaying Digital Images with 3-D CAD to Document as Built Construction, Karl A. Raynar and Gary R. Smith, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p751-758.

PC Networking - A Case Study, Chester J. Zaremba, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1867-1873.

Quality of Map Data in Geographic Information Systems, Gary A. Jeffress, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p221-224.

Scaling Up is Hard to Do: Experiences in Preparing a Case-Based Design Aid Prototype for Field Trial, Eric A. Domeshek, Craig M. Zimring and Janet L. Kolodner, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p430-437. Setting up CADD Right, Susanna C. Smith, CC May 94, p10-11.

Sketch is Worth a Thousand Rule Traces, Renate Fruchter, Mark J. Clayton, Helmut Krawinkler and Paul Teicholz, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1473-1480.

Small - Office CADD Implementation, M. Kevin Parfitt,

CC Apr. 94, p14-15.

Software Interface in Engineering Applications, Charles E. Bowler, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1880-1883.

Spread of Plasticity—Quasi-Plastic-Hinge Approach, Mourad R. Attalla, Gregory G. Deierlein and William McGuire, ST Aug. 94, p2451-2473.

Steel Detailing Neutral File from Modeling Software,

Gerardo Cisneros and J. A. Bohinsky, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p254-259.

Strengthening the Design/Construction Interface Using Electronic Imaging, Document Management and Work Flow Technologies, Jorge A. Vanegas, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p600-

A Symbol-form Mapping Framework for Conceptual Design Support, S. R. Gorti and D. Sriram, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1591-1598.

Technology Framework for Computer-Integrated Construction, Paul Teicholz and Martin Fischer, CC Feb. 94,

p1,9-11. Toward Integrated Models for Structural Design, Namhee K. Hong and Richard Sause, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1310-1317.

Use of Database in Geo-environmental Engineering, Amin Rahman and Thomas J. Moynahan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1251-

Using CADD Application to Support Construction Activities, Annette L. Stumpf, Liang Y. Liu, Sangyoon Chin and Kenneth Ahn, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p531-538.

Utilizing Mathcad for Hydraulic Design of Stormwater Pump Stations, T. Chris Evensen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p814-821.

What Do Project Managers (need to) Know About CADD? Stephen M. Benz, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1884-1891.

Computerized routing

Planning for Power Outages, ET June/July 94, p10.

Computerized scheduling

MDA Planner: Interactive Planning Tool Using Product Models and Construction Methods, Adina Jägbeck, CP Oct. 94, p536-554.

Computerized simulation

Application of the PCRSS Reservoir Simulation Model to the Salt River Project, Jon S. Behrens and Yvonne Reinink, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p295-298

Computer Simulation Model of the Integrated Local Water Supply Plan for the City of Wichita, Kansas, Jerry Blain, Gene Foster, Jeff Klein and Frank Shorney, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p734-737.

Computer simulation of pulsed pumping for remediation under mass transfer limited conditions, Z. Jiang and W. P. Ball, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p352-359.

Computer-Aided Laboratory Teaching in Geotechnics, 1. E. G. Davey-Wilson, El Oct. 94, p430-435.

Correlating Trihalomethane Data, Paul H. Hutton and Francis I. Chung, EE Jan./Feb. 94, p219-241.

A Decision Support System for Multi-Purpose Reservoir Decision support System for Multi-Turpose Resistant Operations, S. B. Shim, H. S. Lee, K. K. Koh, K. D. Shim and D. G. Fontane, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p303-306.

A Decision Support System for Reassessing the Operation of the Chungju Reservoir System, Darrell G. Fontane, Soon Bo Shim and H. S. Lee, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed.

and Harry N. Tuvel, ed., 1994), p299-302.

Design for Durability for Large Reinforced Concrete Shells, Wilfried B. Krätzig, Konstantin Meskouris and Karsten Gruber, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p897-906.

Design of a Network and Travel Simulator: A Tool Box for the Analysis of Route Choice Behavior in the Presence of Information, Kenneth M. Vaughn, Prasuna Reddy, Ryuichi Kitamura, Paul P. Jovanis and Mohamed A. Ab-del-Aty, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p1743-1750.

Dynamic Loading of Airfield Pavements Caused by Aircraft Operations on Rough Runways, Anthony G. Gerardi and Wayne G. Johnson, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p30-41.

Evaluating Roadside Hazards Using Computer-Simulation Model, Paul deLeur, Walid Abdelwahab and Francis Na-

vin, TE Mar./Apr. 94, p229-245.

Graphical-Based Productivity Transient Investigation Using DISCO, Rong-Yau Huang and Jorge A. Vanegas, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1-8.

Groundwater Model Simulation of Chemical Transport from a Nearshore Confined Sediment Disposal Facility, Michael Riley, Gopal Biswas, Charles Boatman, Robert Brockhaus, Mark Utting and Doug Hotchkiss, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1517-1526.

Improved Computer Simulation of 3D Wind Flow Around a Building, Y. S. Zhou and T. Stathopoulos, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

Level-of-Service Analysis of Toll Plazas on Freeway Main Lines, Feng-Bor Lin and Cheng-Wei Su, TE Mar./Apr.

Modeling Municipal Water Demands for a Pump Station Area, Bindu Reddy, Jerry Rogers, Theodore Cleveland, Lu-Chia Chuang and Kathlie Sheu, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p65-68.

Robust Active Control of Cable-Stayed Bridge Subjected to Earthquake Ground Motion, Mario E. Magaña, Alan G. Hernried and Dietmar Scheer, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p317-326.

Routing Debris Flows with Particle Segregation, Tamotsu Takahashi, Hajime Nakagawa, Tatsuo Harada and Yousuke Yamashiki, HY Nov. 92, p1490-1507.

Computers

Assembly of Simulation Networks Using Designs, Plans. and Methods, I. D. Tommelein, R. I. Carr and A. M. Odeh, CO Dec. 94, p796-815.

Computer - Fluent Civil Engineer: What Does It Mean? Robert M. Henry, CC Apr. 94, p1-4,6.

Computer Benefits Can't be Measured by Productivity

Alone, ME May/June 94, p1-2.

Computing in Analysis and Design in Structural Engineer-ing - An Educator's Point of View, John F. Fleming, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p362-368.

Concerns, Worries, and Wringing of Hand (Part 1), Charles S. Hodge, CC Jan. 94, p12-13

Keeping Up With Computers, Charles S. Hodge, CE June 94, p70-72.

Machine Learning of Design Rules: Methodology and Case Study, Tomasz Arciszewski, Eric Bloedorn, Ryszard S. Michalski, Mohamad Mustafa and Janusz Wnek, CP July 94, p286-308.

An Object Oriented Highway Information System in the Client-Server Environment, Kelvin C. P. Wang and John P. Zaniewski, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1959-1966.

On the Net, CE Oct. 94, p8. Onboard Image Processing With Transputers, András Balázs, József Biró and Sándor Szalai, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1323-

Operating System Rundown, Charles S. Hodge, CC May 94, p14-15.

The Reactivity Effects of Nuclide Buildup and Decay During Long-Term Fuel Storage, T. Suto, S. M. Bowman and C. V. Parks, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p831-837.

Still More Concerns, Worries, and Wringing of Hands, Charles S. Hodge, CC Mar. 94, p10-11.

Concentrated loads

Moments in Deck Slabs Due to Cantilever Loads, Aftab A. Mufti, Baidar Bakht and Leslie G. Jaeger, ST June 93, p1761-1777.

Concentration

Experimental Study of Debris Flows, Arbind Mainali and Nallamuthu Rajaratnam, HY Jan. 94, p104-123.

Factors Affecting Nitrite Buildup in Submerged Filter Sys-tem, Oliver J. Hao and Jin M. Chen, EE Sept./Oct. 94, p1298-1307

Modeling of Dissolved Ozone Concentration Profiles in Bubble Columns, Hongde Zhou, Daniel W. Smith and S. J. Stanley, EE July/Aug. 94, p821-840.

Simple Equations to Express Settling Column Data, Adem Ozer, EE May/June 94, p677-682.

The Use of SCADA for Real-time Calculation and Monitoring for CT Compliance at the Ralph D. Bollman Water Treatment Plant, Peter Schoemann and Peter Martin, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2112-2123.

Concentrators

Solar Stretch, Jörg Schlaich, Rudolf Bergermann and Wolfgang Schiel, CE May 94, p47-50.

Admixtures May Add Months to Construction Schedules, ET Dec. 94/Jan. 95, p1,4.

Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994, 0-7844-0034-2,

Advances in Chemical Admixtures for Concrete, Mario Collepardi, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p257-291.

Aging Effect on Bond Strength in Composite Sections, Yasser M. Hunaiti, MT Nov. 94, p469-473.

AISI-FHWA Model Bridge Test, Mark Moore, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1065-1070.

Anchorage of Non-Metallic Prestressing Tendons, Richard J. Schmidt, Charles W. Dolan and Lars E. Holte, (Struc tures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1415-1420.

Application of Concrete-Filled Steel Tubular Columns in Application of Concrete-Fine Steel House Continues and Tall Buildings in Earthquake Area, Chahg-Ji Gong, Xi Lin and Shao-Huai Cai, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p146-151.

Assessment of Risk of Thermal Cracking in Hardening.

Concrete, Mats Emborg and Stig Bernander, ST Oct. 94, p2893-2912.

Bond Strength of Welded Wire Fabric in Concrete Bridge Decks, Bilal M. Ayyub, Naji Al-Mutairi and Peter Chang, ST Aug. 94, p2520-2531.

Cement and Concrete: Their Interrelation in Practice, Adam Neville, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p1-14.

Cement Manufacture and Use, Paul W. Brown, ed., 1994, 0-7844-0048-2, 324pp.

Characteristics of Silica-Fume Concrete, Safwan A. Khedr and Mohamed N. Abou Zaid, MT Aug. 94, p357-375. Checking Concrete Growth, Vann A. Newell, David T.

Tanner and Charles D. Wagner, CE Jan. 94, p70-72. Computer Calculations Speed Tunnel-Lining Design, Gerhard Sauer, Voitech Gall and Erich Bauer, CE June

94, p46-49.

Concrete Shells Today, Heinz Isler, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p820-836. Concrete-Canoe Finals Head South This Year, 20 Teams to

Compete in New Orleans, CE June 94, p75-76.

Construction of the Baytown Bridge, Houston, Man-Chung Tang, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p666-671.

Creep Analysis of Composite Steel-Concrete Members with Deformable Connectors, F. Mola, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p737-742

Creep Effects in Composite Beams with Flexible Shear Connectors, Angelo Marcello Tarantino and Luigino Dezi, ST Aug. 92, p2063-2081.

Creep in Composite Continuous Beams. II: Parametric Study, Luigino Dezi and Angelo Marcello Tarantino, ST July 93, p2112-2133.

Cyclic Performance of Riveted Connections, Ruberto Leon, Gabriel P. Forcier, Charles W. Roeder and F. Robert Preece, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1490-1495.

Cyclical Behavior of Welded Steel Shear Studs, Kurt Michael McMullin and Abolhassan Astaneh-Asl, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1024-1029.

Delayed Ettringite Formation, H. F. W. Taylor, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p122-131.

Development Length of Uncoated Prestressing Strand, Susan N. Lane, (Structures Congress XII, N. C. Baker, ed.

san N. Lane, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p624-629.
Durable Concrete, Bryant Mather, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p52-63.
Dynamic Linear Back Calculation of Pavement Material

Parameters, Jacob Uzan, TE Jan./Feb. 94, p109-126. Dynamic Pavement-Strain Histories from Moving Traffic

Load, Zia Zafir, Raj Siddharthan and Peter E. Sebaaly, TE Sept./Oct. 94, p821-842.

Dynamic Testing of Unreinforced Brick Masonry Infills, Ghassan Al-Chaar, Richard Angel and Daniel P. Abrams, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p791-796.

Earthquake Barrier Technology: Sliding-Friction Energy Dissipation, Marc S. Caspe, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1018-

Effects of Confinement on Concrete Columns: Plasticity Approach, A. I. Karabinis and P. D. Kiousis, ST Sept. 94, p2747-2767.

Enter the Dragon, Scott Danielson, CE Nov. 94, p64-67. Environmental Issues and Management of Concrete Waste in Japan, Yoichi Nojiri, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p424-437.

Estimation of the Thickness of Transition Zone in Concrete and Characteristics of Transition Zone in High-Strength Concrete, Hiroshi Uchikawa, Shunsuke Hanehara and Daisuke Sawaki, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p616.

Fatigue Cracking and Rutting in Flexible Pavements, D. V. Ramsamooj, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y.

Liang, ed., 1994), p132-146.
Feasibility of Dual Technology in Manufacturing Lunar Concrete, Mohsen A. Issa and Husam A. Omar, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p933-941. Fibre Reinforced Concrete - Myth and Reality, Sidney Mindess, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p217-222

Finite Element Modeling of Concrete Expansion and Confinement, F. J. Vecchio, ST Sept. 92, p2390-2406.

Finite-Element Modeling of Deformation and Cracking in Early-Age Concrete, René de Borst and A. H. van den Boogaard, EM Dec. 94, p2519-2534.

Fire Resistance of Concrete-Filled, Fire-Resistant Steel-Tube Columns, Y. Sakumoto, T. Okada, M. Yoshida and S. Tasaka, MT May 94, p169-184.

For the Realization of Lunar Concrete, Hiroshi Kanamori, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p942-951.

Fractals, Fractures, and Size Effects in Concrete, Victor E. Saouma and Christopher C. Barton, EM Apr. 94, p835-

Fracture Energy Formulation for Inelastic Behavior of Plain Concrete, G. Etse and K. Willam, EM Sept. 94, p1983-2011.

Fracture Mechanics and Size Effect of Concrete in Ten-sion, Tianxi Tang, Surendra P. Shah and Chengsheng Ouyang, ST Nov. 92, p3169-3185. Frost Susceptibility of Concrete in Near-Saturated States, B. V. Eniistiin, K. S. Soo and K. L. Bergeson, MT May

94, p290-306.

Gateway to Columbus, John Hillman and Daniel K. Bur-

roughs, CE Dec. 94, p58-61. Heterogeneous Hardening Plasticity Model for Concrete, H. C. Chan, Y. K. Cheung and Y. P. Huang, ST Jan. 94, p46-62.

High Performance Construction Materials and Systems: An Essential Program for America and Its Infrastructure Technical Report, Report 93-5011, Civil Engineering Research Foundation, 1993, 0-87262-939-2, 205pp.

High-Performance Construction Materials and Systems: An Essential Program for America and Its Infrastructure Executive Report, Report 93-5011.E, Civil Engineering Research Foundation, 1993, 0-87262-938-4, 32pp.

Historical Considerations for New Jersey Viaduct, Dennis V. Brizick, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p302-307.

Influence of Concrete Tensile Ductility on Compressive Strength of Confined Columns, L. Bortolotti, MT Nov. 94, p542-563.

Influence of Specimen Size on Effect of Curing Regime on Concrete Compressive Strength, I. Soroka and H. Baum, MT Feb. 94, p15-22.

Influence of Surface Finish on Sorptivity on Concrete, W. J. McCarter, MT Feb. 93, p130-136.

Integration of Multiple Advanced Analytical Techniques to Study Alkali Silica Reactivity in Concrete Railroad Ties, R. J. Lee, A. J. Schwoeble, K. E. Wagner and J. Yuan, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p217-229.

Daniel A. Cuoco, David B. Peraza and Thomas Z. Scarangello, CF Nov. 92, p211-231.

Knowledge-Based Expert System for Concrete Mix Design, Yong Bai and Serji N. Amirkhanian, CO June 94, p357-373.

Long-Term Monitoring of Civil Structures using Smart Structures Techniques, T. Russell Gentry, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1392-1402.

Material Model for Concrete in Cracked and Uncracked States, R. Meyer, H. Ahrens and H. Duddeck, EM Sept. 94, p1877-1895.

Mathematics of Concrete Scaling, Dan F. Adkins, Gary P. Merkley and Gertrudys Brito, MT May 93, p280-288. Mineral Admixtures for Concrete - An Overview of Recent Developments, P. K. Mehta, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p243-256.

Mineral Admixtures: Reactions, Micro-Structure and Macro-Properties, Jan Bijen and Hans Pietersen, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p292-328.

Moisture and Heat Flow in Concrete Walls Exposed to Fire, Jana Šelih, Antonio C. M. Sousa and Theodore W. Bremner, EM Oct. 94, p2028-2043.

NDT Methods for Flaw Detection in Concrete, Nicholas J. Carino, (Cement Manufacture and Use, Paul W. Brown,

ed., 1994), p175-192.

Nonlinear Behavior of Northlight Reinforced Concrete Shells, P. Srinivasa Rao and S. Duraiswamy, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p837-846.

Nonlinear Finite Element Analysis of Concrete Deep Beams, A. Fafitis and Y. H. Won, ST Apr. 94, p1202-

The Normandie Bridge, Michel Virlogeux, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p660-665.

Optimal Design of Structural Concrete Bridge Systems, M. Z. Cohn and Z. Lounis, ST Sept. 94, p2653-2674.

Optimum Number of Specimens for Low-Cycle Fatigue Tests of Concrete, Todorka Paskova and Christian Meyer, ST July 94, p2242-2247.

Performance of Fuel-Resistant Sealers for Asphalt Concrete Pavements, James E. Shoenberger, MT Feb. 94, p137-149.

Polymer Cement Composite - A Critical Review, Satish Chandra, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p15-36.

Predicting Creep and Shrinkage Effects in Cracked Concrete Elements, A. S. Prasada Rao, R. Jayaraman, V. Vimalanandam and S. Sai Babu, ST Sept. 94, p2784-2792.

Production of Lunar Concrete Using Molten Sulfur, Husam A. Omar and Mohsen Issa, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p952-959

Properties of High Fly Ash Content Cellular Concrete, Ronald D. Neufeld, Luis E. Vallejo, Wenyi Hu, Martin Latona, Christopher Carson and Christopher Kelly, EY

Apr. 94, p35-48

Properties of Soundless Chemical Demolition Agents, Jimmie Hinze and James Brown, CO Dec. 94, p816-827

Rate Dependent Plasticity and Damage for Concrete, V. P. Panoskaltsis, J. Lubliner and P. J. M. Monteiro, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p27-

Recent Developments in Physical Testing of Aggregates to Ensure Durable Concrete, C. A. Rogers and S. A. Senior, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994),

Reliability Analysis of Creep and Shrinkage Effects, C. Q. Li and R. E. Melchers, ST Sept. 92, p2323-2337.

Report: Specs Not Met but Los Angeles Metro Tunnel Structurally Adequate', CE May 94, p24-25.

Rough Cracks Subjected to Earthquake Loading, Joost Walraven, ST May 94, p1510-1524. Scaling Laws in Mechanics of Failure, Zdeněk P. Bažant,

EM Sept. 93, p1828-1844. Shear Connection in Haunched Composite Beams with Sloping Sides, Deric John Oehlers and Sung Moo Park,

ST July 94, p2227-2232.

Silica Fume (Microsilica) Fundamentals for Use in Concrete, Mark D. Luther and Philip A. Smith, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p75-

Simplified Calculation Method for Force Transfer in Composite Columns, Jan A. Wium and Jean-Paul Lebet, ST Mar. 94, p728-746.

Simplified Creep Analysis of Composite Beams with Flexible Connectors, Luigino Dezi, Carlo Ianni and Angelo Marcello Tarantino, ST May 93, p1484-1497.

The Slender Tower of 52-54 East End Avenue, Ahmad Rahimian, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1562-1567

Static Response of Fiberglass Pretensioned Columns, Mohsen Issa, Rajan Sen, Daniel Mariscal and Mohsen Shahawy, ST Dec. 94, p3634-3648.

Steel-Fiber-Reinforced Wet-Mix Shotcrete: Comparisons with Cast Concrete, Nemkumar Banthia, Jean-François Trottier and Denis Beaupré, MT Aug. 94, p430-437.

Study of Stress Concentrations at the Intersection of Underground Chambers for the Superconducting Super Collider Project, Fwu-Ding (Kim) Lin, Lichu Guan and Steven Baldauf, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1975-1982.

Two New Methods of Fictitious-Crack Model and Their Applications, Yuan N. Li, Michael Müller and J.-D.

Wörner, EM Dec. 94, p2604-2620.

The Use of Secondary Products in the Cement and Concrete Industry, Bjarne Osbaeck, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p107-121.

Utilization of Used Foundry Sand in Concrete, Tarun R. Naik, Viral M. Patel, Dhaval M. Parikh and Mathew P. Tharaniyil, MT May 94, p254-263.

World of Concrete Celebrates 20th Anniversary, CE Mar. 94, p22,24.

Concrete additives

Milk Jugs, Soda Bottles and Concrete, CE Dec. 94, p8.

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Checking Concrete Growth, Vann A. Newell, David T. Tanner and Charles D. Wagner, CE Jan. 94, p70-72. High- and Ultrahigh-Performance Concretes Are Ready to

Rehearse, ET Apr./May 94, p1,4-5.

Mechanical Properties of Very Early Strength Concretes, S. H. Ahmad and Paul Zia, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p701-708.

Concrete blocks

Coupling Translation and Rocking Motions, J. P. Lee and J. A. Bohinsky, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p61-66.

Empirical Mohr-Coulomb Failure Criterion for Concrete Block-Mortar Joints, M. Ayubur Rahman and Subhash C. Anand, ST Aug. 94, p2408-2422.

Simplified Dynamic Analysis for Gravity Dams, A. Ghobarah, Ahmad El-Nady and Tarek Aziz, ST Sept. 94, p2697-2716.

Wave Run-Up and Reflection on a Permeable Sea Wall, Mitsuo Takezawa, Susumu Kubota and Shintaro Hotta, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p680-694

Concrete construction

Analysis of Concrete Construction Live Loads on Newly Poured Slabs, Saeed Karshenas and Haitham Ayoub, ST May 94, p1525-1542. Bridge System Breaks New Ground as Storage Vault, CE

July 94, p13-14.

Comprehensive Reliability Analysis of Prestressed Concrete Beams, A. S. Al-Harthy and D. M. Frangopol, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p193-198

Computer-Assisted Design of Hollow Concrete Masonry Bearing Walls, Kathleen M. Bradley and Terence A. Weigel, (*Computing in Civil Engineering*, Khalil Khozeimeh, ed., 1994), p1703-1710.

Concrete Buildings in Regions of High Seismicity, S. K. Ghosh, (Structures Congress XII, N. C. Baker, ed. and

Barry J. Loodno, ed., 1994), p31-36.

Corrosion Resistant Epoxy-Coated Reinforcing Steel, Robert G. Mathey and James R. Clifton, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p109-115.

Design and Analysis of the 712 Fifth Avenue Structure, Louis A. Occhicone and Stanley Wojnowski, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1556-1561.

Failures and Failure Mechanisms for Exterior Walls, Gene S. Sanders, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p509-518.

Huntsville Students Win National Concrete-Canoe Contest for Second Straight Year, NE Aug. 94, p1,7.

Impact Echo in the Thick of Pavement Construction, CE Dec. 94, p19,21.

One Peachtree Center: Atlanta Georgia, Housh Rahimza-deh and M. Nasim Akhtar, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p164-169

Roller-Compacted Concrete, U.S. Army Corps of Engineers, 1994, 0-87262-999-6, 100pp.

Selecting Precast Concrete Building Systems, John I. Mess-ner, Victor E. Sanvido and Masaaki Ikeda, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p368-371.

Survey Results for Concrete Construction Live Loads on Newly Poured Slabs, Haitham Ayoub and Saeed Karshe-

nas, ST May 94, p1543-1562.

Testing of Concrete Curtain Wall Panels Reinforced with FRP Grids, Edwin R. Schmeckpeper, Richard Nielsen and Charles H. Goodspeed, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1250-1255.

Transfer of Spent Nuclear Fuel Into Multi-Purpose Canister Storage, Roger G. Wagstaff, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p444-451.

Use of Composite Timber-concrete Floors in Residential Buildings, B. H. Ahmadi and M. P. Saka, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p508-513.

Concrete deformation

Load-Deformation Curves of Normal and High Strength Concrete for a Range of Height to Diameter Ratios, D. C. Jansen and S. P. Shah, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994),

Concrete deterioration

Destructive Testing of Decommissioned Concrete Slab Bridge, R. A. Miller, A. E. Aktan and B. M. Shahrooz, ST July 94, p2176-2198.

Fiber Composite Warp for Rehabilitation of Concrete Structures, Salem S. Faza and Hota V. S. GangaRao, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1135-1139.

Middle Eastern Concrete Deterioration: Unusual Case History, Jerome P. O'Connor, CF Aug. 94, p201-212.

Concrete durability

Characteristics of Silica-Fume Concrete, Safwan A. Khedr and Mohamed N. Abou Zaid, MT Aug. 94, p357-375.

Durability of Calcium Aluminate Cement Concretes, A. Capmas and C. M. George, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p377-405.

Durable Concrete, Bryant Mather, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep

L. Sarkar, ed., 1994), p52-63.

Fluid Microconcrete - Properties and Application, M. Decter, D. Diamond, R. W. Lambe and D. Mueller, (Infrastructure: New Materials and Methods of Repair,

Kim D. Basham, ed., 1994), p725-734.

High-Performance Concrete Incorporating Large Volumes of ASTM Class F Fly Ash, A. Bilodeau and V. M. Malhotra, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p508-523

Macrocell Corrosion of Bent Epoxy-Coated Bars, Khaled Kahhaleh, James Jirsa, Ramon Carrasquillo and Harovel Wheat, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p8-15.

Phase Equilibria in the CaO - Al₂O₃ - SiO₂ - H₂O System in Relation to Blended HAC Cements, K. C. Quillin, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p615.

Selected Properties of High Performance Concrete, Erik J. Sellevold, Harald Justnes, Sverre Smeplass and Einar Aasved Hansen, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p562-609.

Concrete masonry

tation, Franklin Y. Cheng, ed., 1994), p67-76.

Concrete pavements

Analytical and Experimental Analyses of Fatigue Crack Propagation in Asphalt Concrete Overlays, R. Ballarini, G. C. Ferrante and J. L. Figueroa, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p978-983.

Control of Random Crack Formation in Portland Cement Concrete Pavements, Yeou-Shang Jenq and Sang-Chel Kim, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p972-977.

Dynamic Model for Analysis of Concrete Pavements, Karim Chatti, John Lysmer and Carl L. Monismith, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p984-989.

Field Evaluation of Concrete Pavement Joint Sealants in Utah, Timothy D. Biel, Hosin Lee, Sherm Hopson and David Eixenberger, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p147-154.

Hydraulic Properties of Surface Runoff on Ash-Mixed Concrete Pavement, Reza M. Khanbilvardi and Shahriar Afshari, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p205-209.

Interface Shear Stress in Overlaid Concrete Pavements, C. M. Lau, T. F. Fwa and P. Paramasivam, TE Mar./Apr.

94, p163-177.

Kentucky's Experience with CRM-HMA, Kamyar C. Mah-boub, Karen A. Sizemore, Robert D. Bosley and Philip A. Creamer, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p432-440.

Long-Term Strength Development of Pavement Concretes, David A. Lange, MT Feb. 94, p78-87.

Nighttime Cement Concrete Pavement Replacement Seattle-Tacoma International Airport, Jo A. Lary and John Rothnie, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p92-101.

Undersealing of Portland Cement Concrete Pavements:
Does it Work? Ramzi Taha, Tom Papagiannakis and Ali Selim, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p163-169.

The Use of Recyclable Waste Materials in Hot Mix Asphalt Concrete Highway Pavements, Stanley K. Ciesielski, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p327-335.

Use of Waste Rubber in Light-Duty Concrete Pavements, Richard R. Schimizze, James K. Nelson, Serji N. Amirkhanian and John A. Murden, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p367-374.

Warping Stresses in Concrete Pavements on Pasternak Foundation, X. P. Shi, T. F. Fwa and S. A. Tan, TE

Nov./Dec. 93, p905-913.

Concrete piles

Jacket Arrest Cracking of Prison Bridge Piles, CE Dec. 94, p14,16-17.

Concrete pipes

Contractor Must Notify Supplier or Get the Goods, CE June 94, p30.

Large Diameter Storm Sewer with Energy Dissipation Structures, Lynn Hill, John Maki and Jerry Pfarr, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p395-410.

Velocity Control Rings for RC Pipe on Steep Slopes, Glen Drogin, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p928-

Concrete placing

Dynamic Modeling of Slab Formwork during Concrete Placement, Saced Karshenas and Stephen M. Heinrich, ST July 94, p2199-2217.

Machine Learning in Civil Engineering - Important Issues and Challenges, Benoît Julien, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p877-884.

Concrete properties

Admixture Applications in Large Concrete Pours, Augustine Uchechukwu Elinwa, MT Aug. 94, p352-356.

Cement and Concrete: Their Interrelation in Practice, Adam Neville, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed.,

1994), p1-14.

Evaluating Concrete Mesoscale Properties Using Neural Networks, John E. Bolander, Jr., Toshihiro Ebihara and Hiroshi Hikosaka, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p475-

Extended Set Control of Concrete, Emmanuel K. Attiogbe and Hamid Farzam, (Cement Manufacture and Use, Paul

W. Brown, ed., 1994), p137-146.

Long-Term Strength Development of Pavement Concretes, David A. Lange, MT Feb. 94, p78-87. Mechanical Properties of Very Early Strength Concretes,

S. H. Ahmad and Paul Zia, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p701-708

Use of Recycled Tire Rubbers in Concrete, Timothy D. Biel and Hosin Lee, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p351-

Concrete slabs

Brooklyn Battery Tunnel Rehab is Under Way, CE May 94, p28.

Continuity in Precast Prestressed Concrete Girder Bridges, O. Abdalla, J. A. Ramirez and R. H. Lee, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p479-484.

Durability of Concrete Materials Under Pavement Joints, Stephen R. Munoz and Eddie Y. J. Chou, (Infrastructure: New Materials and Methods of Repair, Kim D.

Basham, ed., 1994), p1-7.

Dynamic Model for Analysis of Concrete Pavements, Karim Chatti, John Lysmer and Carl L. Monismith, (Struc-tures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p984-989.

Experimental and Numerical Studies of Composite Beams Exposed to Fire, Dietmar Hosser, Thomas Dorn and Osa-

ma El-Nesr, ST Oct. 94, p2871-2892. Impulsive Punching of Fiber-Reinforced Concrete Slabs, Pietro G. Gambarova and Cristiano Schumm, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p252-257.

Integrated Analytical Procedure for Concrete Slabs Under Impact Loads, Ayaho Miyamoto, Michael William King and Manabu Fujii, ST June 94, p1685-1702.

Rigid Pavement Évaluation with Seismic Pavement Analyzer, S. Nazarian, M. Baker and K. Crain, (Infrastructure: New Materials and Methods of Repair, Kim D.

Basham, ed., 1994), p508-515. Shock-tested R. C. Slabs: Significant Parameters, François Toutlemonde and Pierre Rossi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p227-232.

Structural Evaluation of Airfield Rigid Pavements Using Falling Weight Deflectometer, Boming Tang, TE May/ June 93, p467-476.

Concrete structures

Admixture Applications in Large Concrete Pours, tine Uchechukwu Elinwa, MT Aug. 94, p352-356.

Concrete Watertight Structures and Hazardous Liquid Containment, Robert Hengst, 1994, 0-87262-791-8, 150pp.

Evaluation of Silane Sealer Application on Concrete, Doran L. Glauz and Vijay K. Jain, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p155-162.

Evaluation of Software for Analysis and Design of Rein-forced Concrete Structures, Andrew D. Betaque and Kamal B. Rojiani, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p466-473. Experimental Study of Embedded Fiber-Optic Strain

Gauges in Concrete Structures, S. F. Masri, M. S. Agba-bian, A. M. Abdel-Ghaffar, M. Higazy, R. O. Claus and

M. J. de Vries, EM Aug. 94, p1696-1717.

Flexural Response of FRP Reinforced Concrete Structures, El-Attar A. El-bar, Ibrahim M. Ibrahim and Ayman S. Mosallam, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p583-591. Fracture Size Effect: Review of Evidence for Concrete Structures, Zdeněk P. Bažant, Joško Ožbolt and Rolf Eligehausen, ST Aug. 94, p2377-2398.

FRP Research for Highway Applications in Florida, Rajan Sen and Mohsen Shahawy, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994),

GLG Grand, Atlanta Design and Construction, Martin R. Ocon, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p25-30.

Hybrid Composite Beams: Analytical Modeling, S. A. Bhutta and I. L. Al-Qadi, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p178-190.

Interactive Cost Estimating During Design, Robert I. Carr, Hyun-Soo Lee and Photios G. Ioannou, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p1556-1563.

Marta North Line Midtown Station, Jerzy T. Jacak and Cheryl L. McAfee, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p176-181

Baker, ed. and Barry J. Loodino, ed., 1994, p.176-181. Middle Eastern Concrete Deterioration: Unusual Case History, Jerome P. O'Connor, CF Aug. 94, p.201-212. Nonlinear Analysis of Prestressed Concrete Structures, Mohd-Hisham Mohd-Yassin and Filip C. Filippou, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodino and 1900). add 1111-126.

Loodno, ed., 1994), p1421-1426.

Nonlinear Dynamic Response of an RC Structure with Advanced Cladding, Loai F. El-Gazairly, Barry J. Goodno and James I. Craig, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1262-1267. Plenty of this Sample to go Around, CE Oct. 94, p8. Recent Advances in 3D Non-Linear FE-Analysis of R/C

and P/C Beam Structures, Franz-Josef Ulm, Jean-Luc Clément and Johann Guggenberger, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1427-1432.

Reliability and Response Control of R/C Buildings, A. H-S. Ang and D. de Leon, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1593-1599. Seismic Behavior of Non-Ductile Concrete Frame Struc-

tures, Yahya C. Kurama, Stephen P. Pessiki, Richard Sause and Shaojie Wu, (Structures Congress XII, N. C Baker, ed. and Barry J. Loodno, ed., 1994), p1496-1501. Structural Damage Identification from Dynamic-Test Data,

Juan R. Casas and Angel C. Aparicio, ST Aug. 94, p2437-2450.

Strut-Tie Model Design of Disturbed Regions in Concrete Structures, Y. M. Yun, A. Alshegeir and J. A. Ramirez, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p233-238.

Tests for Biogenic Sulfuric Acid Corrosion in a Simulation Chamber Confirms the On Site Performance of Calcium Aluminate Based Concretes in Sewage Applications, Wolfgang Sand, Thierry Dumas, Serge Marcdargent, Albert Pugliese and Jean-Louis Cabiron, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p35-55.

Concrete structures failure

Assessment of Building Damage Sustained During Hurricane Iniki (Comparison with Hurricane Iwa), Michael K. H. Yee and Arthur N. L. Chiu, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p102-110.

Concrete technology

Concrete Canoes from 20 Schools to Race this Month in New Orleans in Contest Finals, NE June 94, p15

Concrete-Canoe Finals Head South This Year, 20 Teams to Compete in New Orleans, CE June 94, p75-76.

PCI Plant and Personnel Certification for the Precast Concrete Industry, John S. Dick, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p912-918.

World of Concrete Celebrates 20th Anniversary, CE Mar. 94, p22,24

Concrete tests

In-Place Determination of Concrete Strength by the Impact-Echo Method, Stephen Pessiki and Matthew Johnson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1340-1345. Laser Generation and Detection of Ultrasound in Concrete, Laurence J. Jacobs, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1328-1333. Load Rate Effects on Concrete Compressive Strength, Jo-

seph W. Tedesco, C. Allen Ross and Mary L. Hughes, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p245-251.

NDT Methods for Flaw Detection in Concrete, Nicholas J. Carino, (Cement Manufacture and Use, Paul W. Brown,

ed., 1994), p175-192.
Scale and Modeling Effects in Concrete Armor Experiments, Jeffrey A. Melby and George F. Turk, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p686-700. Shock-tested R. C. Slabs: Significant Parameters, François

Toutlemonde and Pierre Rossi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p227-232

Concrete, lightweight Lightweight Concrete - A Proven Material for Two Millennia, Theodore W. Bremner, Thomas A. Holm and Valentina F. Stepanova, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p37-51.

Lightweight Concrete for a Segmental Bridge, Juan A. Mu-rillo, Steve Thoman and Dennis Smith, CE May 94,

p68-70.

Concrete, precast

Application of FRP Reinforcement in Structural Precast Concrete, T. Russell Gentry and Lawrence C. Bank, (In-frastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p575-582.

Continuity in Precast Prestressed Concrete Girder Bridges, O. Abdalla, J. A. Ramirez and R. H. Lee, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p479-484.

Developing an Object Based Planning System for Precast Concrete Building Structures, John I. Messner, Victor E. Sanvido and Masaaki Ikeda, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1426-1429.

Emerging Technologies for Short-Span Bridge Solutions, M. Zoghi, D. A. Tomley and M. P. Henderson, (Infrastructure: New Materials and Methods of Repair, Kim

D. Basham, ed., 1994), p1163-1170.

In-Situ Nondestructive Testing of Buried Precast Concrete Pipe, Dennis A. Sack and Larry D. Olson, (Infrastruc-ture: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p499-507.

Innovative Applications of Precast Concrete in Repair of Hydraulic Structures, James E. McDonald, (Infrastructure: New Materials and Methods of Repair, Kim D.

Basham, ed., 1994), p963-970.

Lateral Bracing Criteria of the Composite Braces, Kazuo Inoue, Yasuo Higashibata and Kazuhiro Inoue, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p152-157.

Load Carrying Capacity of SPC Composite Column, Toshiyuki Tanaka, Kazuo Inoue and Cheol-hwan Kim, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p827-832.

Offshore Rescue, Jonathan A. French, Paul Gustafson, John S. Murk and Kellene M. Burn-Lucht, CE Oct. 94, p42-

45

PCI Plant and Personnel Certification for the Precast Concrete Industry, John S. Dick, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p912-918.

Precast Speeds Housing Construction, CE Mar. 94, p92. Seismic Response of Concrete Tilt-Up Systems, Sharon L. Wood and Neil M. Hawkins, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1484-1489.

Selecting Precast Concrete Building Systems, John I. Mess-ner, Victor E. Sanvido and Masaaki Ikeda, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

Standard Practice for Direct Design of Buried Precast Concrete Pipe Using Standard Installations (SIDD) (St No. 93-015), American Society of Civil Engineers, 1994, 0-87262-995-3, 50pp.

Structural Capacity of Precast Piles with Grouted Base, Osamu Kusakabe, Masaaki Kakurai, Katsutoshi Ueno and Yoshinao Kurachi, GT Aug. 94, p1289-1306.

Concrete, prestressed

Algorithm for Hysteresis Analysis of Prestressed-Concrete Frames, Xiaozu Su and Bolong Zhu, ST June 94, p1732-1744.

Bridge Rehabilitation Using Composite Materials, William W. Finch, Jr., Michael J. Chajes, Dennis R. Mertz, Victor N. Kaliakin and Ahmad Faqiri, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1140-1147.

Characteristics of the US Highway Bridge Population, Kenneth F. Dunker and Basile G. Rabbat, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p1006-1013.

Comparative Analysis of Bridge Superstructure Deteriora tion, David Veshosky, Carl R. Beidleman, Gerald W. Buetow and Muge Demir, ST July 94, p2123-2136.

Ductow and muge Demir, S1 July 94, p2123-2136. Comprehensive Reliability Analysis of Prestressed Concrete Beams, A. S. Al-Harthy and D. M. Frangopol, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p193-198. Computer Analysis of Continuous P/C Highway Bridge Girders with Variable Depth, Hani Melhem and Weiqun Zhang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p696-703.

Continuity in Precast Prestressed Concrete Girder Bridges, O. Abdalla, J. A. Ramirez and R. H. Lee, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p479-484.

Deformations in Composite Prestressed Concrete Bridge Deck Panels, Robert E. Abendroth, ST Nov. 94, p3223-

3242

Design and Construction of Post-Tensioned Concrete Floor Systems, D. Kirk Harman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1403-

Design Guidelines for the Use of Debonded Strands, Bruce W. Russell and Ned H. Burns, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p618-

Design of Prestressed Hollow Core Slabs with Reference to Web Shear Failure, Lin Yang, ST Sept. 94, p2675-2696. Development Length of Uncoated Prestressing Strand, Susan N. Lane, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p624-629.

Distress in Prestressed Concrete Roof Girders at a Cement Plant, W. P. S. Dias, A. D. C. Jayanandana, M. C. M. Fonseka and A. A. D. A. J. Perera, CF Feb. 94, p6-15.

Fatigue of Prestressed Concrete Beams with Inclined Strands, John F. Muller and Peter F. Dux, ST Apr. 94, p1122-1139.

Guide for the Design of Prestressed Concrete Poles, William Y. Ford, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p591-596.

Nonlinear Analysis of Prestressed Concrete Structures, Mohd-Hisham Mohd-Yassin and Filip C. Filippou, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1421-1426.

Performance of Prestressed Concrete Roofs During Hurricane Andrew, Wimal Suaris and Mohammed S. Khan,

CF Feb. 94, p16-30.

Performance of Spun Prestressed Concrete Poles During Hurricane Andrew, Fouad H. Fouad, Norman L. Scott, Elizabeth Calvert and Michael Donovan, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p362-376.

Predicting Creep and Shrinkage Effects in Cracked Concrete Elements, A. S. Prasada Rao, R. Jayaraman, V. Vimalanandam and S. Sai Babu, ST Sept. 94, p2784-

Prestress Force Effect on Vibration Frequency of Concrete Bridges, M. Saiidi, B. Douglas and S. Feng, ST July 94, p2233-2241.

Prestressed Concrete Failures Due to Uplift, Wimal Suaris, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1433-1438.

Recent Advances in 3D Non-Linear FE-Analysis of R/C and P/C Beam Structures, Franz-Josef Ulm, Jean-Luc Clément and Johann Guggenberger, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1427-1432.

Reliability Assessment of Prestressed Concrete Beams, Ali S. Al-Harthy and Dan M. Frangopol, ST Jan. 94, p180-

Reliability-Based Design of Prestressed Concrete Beams, Ali S. Al-Harthy and Dan M. Frangopol, ST Nov. 94, p3156-3177.

Stress and Strain in Curved Noncracked Concrete Mem-bers, Makoto Kawakami and Amin Ghali, ST Feb. 94,

p527-537

The Tatara Bridge - World's Longest Cable-Stayed Span, Manabu Ito and Takeo Endo, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p677-

Time-related Deflections of Cantilever Bridges, Cornelis van der Veen, Marcel van Vliet and Ane de Boer, (Computing in Civil Engineering, Khalil Khozeimeh, ed.,

1994), p922-929.

Using Hydrophones to Monitor Prestressed Concrete Pipe for Reinforcing Wire Failures, Douglas J. Buchanan, Malin L. Jacobs and Fred A. Travers, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p212-225.

Concrete, reinforced

Advanced Nonlinear Formulation for Reinforced Concrete Beam-Columns, B. A. Izzuddin, C. G. Karayannis and A. S. Elnashai, ST Oct. 94, p2913-2934.

Analytical Model for Steel-Jacketed RC Circular Bridge Columns, Y.H. Chai, M. J. N. Priestley and F. Seible, ST

Aug. 94, p2358-2376.

Application of Adaptive Analysis to Reinforced Concrete Frames, C. G. Karayannis, B. A. Izzuddin and A. S. El-nashai, ST Oct. 94, p2935-2957.

Application of Field Data to Serviceability and Life Prediction of Highway Bridges, Jamshid Mohammadi, Sidney A. Guralnick and Ramakrishna Polepeddi, (Infrastruc ture: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1089-1096.

Assessment of Building Damage Sustained During Hurri-cane Iniki (Comparison with Hurricane Iwa), Michael K. H. Yee and Arthur N. L. Chiu, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p102-110.

Bar Yield Penetration in Monotonically Loaded An-chorages, John F. Bonacci, ST Mar. 94, p965-986. Behavior of Pressure Tunnels and Guidelines for Liner Design, Gabriel Fernández, GT Oct. 94, p1768-1791.

Behavior of RC Beams under Sustained Load, Nie Jianguo and Shen Jumin, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p239-244.

Blast Demolition of Reinforced Concrete Industrial Chimneys, Friedhelm Stangenberg, (*Spatial, Lattice and Tension Structures*, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p290-299.

Bond Development of Thermoplastic FRP Shear Reinforcement Stirrups, Justin Currier, Christian Fogstad, David Walrath and Charles Dolan, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p592-597.

1994b, J392-39.
1994b, J392-39.
The BS8110 CAL Program for Teaching RC Design, B. S. Choo, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1663-1670.
Characteristics of the US Highway Bridge Population, Kenneth F. Dunker and Basile G. Rabbat, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), 1996. p1006-1013.

Chicago Automates Expressway Lanes, Rita Robison, CE

Sept. 94, p52-55.

Chloride Extraction and Re-Alkalization of Reinforced Concrete Stops Steel Corrosion, Emmanuel E. Velivasakis, Sten K. Henriksen and Richard Hauer, (In-Frastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1127-1134.

Compression Response of Cracked Reinforced Concrete, F. J. Vecchio and M. P. Collins, ST Dec. 93, p3590-

3610.

Concrete Columns Reinforced with Fiber Reinforced Plastic Rebars, Saeed Daniali and Noel S. Paramanantham, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p567-574.

Confining Reinforcement for Concrete Columns, S. Watson, F. A. Zahn and R. Park, ST June 94, p1798-1824.

Corrosion Resistant Epoxy-Coated Reinforcing Steel, Robert G. Mathey and James R. Clifton, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p109-115.

Crack Width Control with Engineered Cementitious Com-posites in R/C Structures, Mohamed Maalej and Victor C. Li, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p359-366.

Creep and Shrinkage Deflections of RC Beams with Steel Fibers, Kiang-Hwee Tan, P. Paramasivam and Kah-Chai

Tan, MT Nov. 94, p474-494.

Cyclic Behavior of Joints Between Steel Beams and Reinforced Concrete Columns, Ryoichi Kanno and Gregory G. Deierlein, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1137-1142

Damage Prediction in Reinforced Concrete Structures under Cyclic Loading, B. Garstka, W. B. Krätzig and F. Stangenberg, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p280-289.

Design Aids for Reinforced Concrete Colum Sun and Zhi-Tao Lu, ST Nov. 92, p2986-2995.

Design and Construction of Post-Tensioned Concrete Floor Systems, D. Kirk Harman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1403-

Design for Durability for Large Reinforced Concrete Shells, Wilfried B. Krätzig, Konstantin Meskouris and Karsten Gruber, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p897-906.

Design of Lateral Steel in Columns, Shamim A. Sheikh and Murat Saatcioglu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p432-437.

Destructive Testing of Decommissioned Concrete Slab Bridge, R. A. Miller, A. E. Aktan and B. M. Shahrooz, ST July 94, p2176-2198.

Different Approaches to Rating Slab Bridges, Vikas Huria, Kuo-Liang Lee and Ahmet E. Aktan, ST Oct. 94, p3056-3062.

Discrete Modeling of Soil-Structure Interaction Under Dynamic Loading, Grzegorz Bak, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p873-876.

Distributed Flexibility Models for Nonlinear Analysis of RC Structures, Sashi K. Kunnath, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p145-154

A Dome For the 21st Century, John Zils, Mark Sarkisian and Ahmad Abdelrazaq, CE Feb. 94, p36-39. Durability of Composite Material Reinforcement, Michael

J. Chajes, Dennis R. Mertz, Theodore A. Thomson, Jr. and Cory A. Farschman, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994),

Dynamic Response of Steel Fiber Reinforced Concrete, David H. Sanders and Qiudong Wu, (Structures Con-gress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p833-838.

Earthquake Response of Flat-Slab Buildings, Ahmad J. Durrani, S. T. Mau, Amr Ahmed AbouHashish and Yi Li, ST Mar. 94, p947-964.

Equivalent Frame Analysis of Flat Plate Buildings for Seismic Loading, Y. H. Luo, A. J. Durrani and J. P. Conte, ST July 94, p2137-2155.

Evaluation of Software for Analysis and Design of Reinforced Concrete Structures, Andrew D. Betaque and Kamal B. Rojiani, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p466-473.

Experimental Evaluation and Finite Element Analysis of Experimental ventuation and rune castineta randyar of Masonry-Infilled R/C Frames, P. B. Shing, A. B. Mehrabi, M. Schuller and J. L. Noland, (Analysis and Computation, Franklin Y, Cheng, ed., 1994), p84-93.

Experimental Verification of Beam Models for RC, Toshing and Computation, Franklin Y, Cheng, ed., 1994, p84-93.

katsu Ichinose and Katsuki Takiguchi, ST Aug. 94, p2261-2280.

Failure of the Turkey Point Unit 1 Reinforced Concrete Chimney During Hurricane Andrew, W. F. Brannen, T. D. Joseph, Randolph W. Snook and Robert A. Porthouse, (Hurricanes of 1992: Lessons Learned and Implinouse, (Hurricanes of 1992; Lessons Learnea and Impirations for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p405-414.
Fibre Reinforced Concrete - Myth and Reality, Sidney Mindess, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994),

p217-222.

Field Measurements of Tensile Forces on a Spherical Dome Sector Caused by Internal Load of a Granular Product in Storage, Jack L. Brunk, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p172-179.

Finite Element Analysis of Shear in RC Girders, Pascal Casanova, Merret Fliedner, Pierre Rossi and Franz-Josef Ulm, (Analysis and Computation, Franklin Y. Cheng,

ed., 1994), p223-229.

Fire Resistance of Circular Steel Columns Filled with Bar-Reinforced Concrete, T. T. Lie, ST May 94, p1489-

Flat Plates with Regular and Irregular Column Layouts.I: Analysis, Kolbjorn Saether, ST May 94, p1563-1579. Flat Plates with Regular and Irregular Column Layouts.II: Numerical Evaluations, Kolbjorn Saether, ST May 94,

Flexural Analysis of Reinforced Concrete Beams Containing Steel Fibers, Byung Hwan Oh, ST Oct. 92, p2821-

Flexural Behavior of Simcon, David J. Akers and Ziad Bayasi, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p375-379.

Flexural Response of FRP Reinforced Concrete Structures, El-Attar A. El-bar, Ibrahim M. Ibrahim and Ayman S. Mosallam, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p583-591. Flexural Strength of Profiled Beams, Deric J. Oehlers,

Howard D. Wright and Matthew J. Burnet, ST Feb. 94,

p378-393.

Fluid Microconcrete - Properties and Application, M. Decter, D. Diamond, R. W. Lambe and D. Mueller, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p725-734.

Generating Reinforcement in FE Modeling of Concrete Structures, Fariborz Barzegar and Srinivas Maddipudi,

ST May 94, p1656-1662.

GLG Grand, Atlanta Design and Construction, Martin R. Ocon, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p25-30.

Graphite Prestressed Concrete Deck for Navy Facilities, Srinivasa L. Iyer, Vijayakumar Ranganathan and Randy Bagby, (Infrastructure: New Materials and Methods of

Repair, Kim D. Basham, ed., 1994), p400-407. Guidelines for Design of Joints between Steel Beams and Reinforced Concrete Columns, ASCE Task Committee on Design Criteria for Composite Structures in Steel and

Concrete, ST Aug. 94, p2330-2357.

High Strength Shotcrete and Concrete on the SSC Project, Leon A. Berdugo, Prabir Das and C. J. Roth, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p761-766.

Image-Based Expert-System Approach to Distress Detec-tion on CRC Pavement, Stephen Tsao, Nasser Kehtarna-vaz, Paul Chan and Robert Lytton, TE Jan./Feb. 94,

p52-64.

Impulsive Punching of Fiber-Reinforced Concrete Slabs, Pietro G. Gambarova and Cristiano Schumm, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p252-257.

Influence of Membrane Forces on Transverse-Shear Reinforcement Design, Perry Adebar and Weishi He, ST Apr. 94, p1347-1366.

ISDP: Integrated Approach to Seismic Design of Reinforced Concrete Structures, William C. Stone and Andrew W. Taylor, ST Dec. 94, p3548-3566.

Long Term Performance of Fiber Reinforced Cements and Concretes, Arnon Bentur, (Advances in Cement and Concrete, Michael W. Grutzeck; ed. and Shondeep L. Sarkar, ed., 1994), p223-234.

Long-Term Deflection of RC Beams, W. A. M. Alwis, A. Olorunniwo and K. K. Ang, ST July 94, p2220-2226.

Macroelement Model for Shear Wall Analysis, Jerome M. James and Sashi K. Kunnath, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1505-1512.

Maintaining Reliability of Concrete Structures. I: Role of Inspection/Repair, Yasuhiro Mori and Bruce R. Ellingwood, ST Mar. 94, p824-845.

Maintaining Reliability of Concrete Structures. II: Optimum Inspection/Repair, Yasuhiro Mori and Bruce R. Ellingwood, ST Mar. 94, p846-862.

Mechanical Behavior of Dowels Embedded in Concrete, Luigi Biolzi and Natalino Gattesco, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p630-635.

Methodology for Forensic Investigations of Seismic Damage, Duane Castaneda and Colin Brown, ST Dec. 94,

p3506-3524.

Microcomputer-Aided Analysis and Design of Spandrel Concrete Beams Subjected to Combined Bending and Torsional Loads, Nadar Ghafoori and Jeffrey Bucholc, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1711-1718.

Middle Eastern Concrete Deterioration: Unusual Case History, Jerome P. O'Connor, CF Aug. 94, p201-212.

Model for Optimal Design of Reinforced Concrete Beam, B. K. Chakrabarty, ST Nov. 92, p3238-3242.

New Methodology for Seismic Design of RC Shear Walls, John W. Wallace, ST Mar. 94, p863-884.

Nonlinear Analysis of a Reinforced Concrete Folded Plate Structure, Pattabhi Sitaram, Stuart Swartz and Chidambaram Channakeshava, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p857-866.

Nonlinear Finite Element Analysis of Deteriorated RC Slab Bridge, B. M. Shahrooz, I. K. Ho, A. E. Aktan, R. de Borst, J. Blaauwendraad, C. van der Veen, R. H. Iding

and R. A. Miller, ST Feb. 94, p422-440.

Nonlinear Finite Element Analysis of RC Slab Bridge, Vikas Huria, Kuo-Liang Lee and A. Emin Aktan, ST Jan. 93, p88-107.

An Object-Oriented Approach for Reinforced Concrete Design, Ajay B. Kulkarni and Kamal B. Rojiani, (Com-puting in Civil Engineering, Khalil Khozeimeh, ed., 1994), p161-168.

Object-Oriented Modeling of Design System for RC Buildings, Ziga Turk, Tatiana Isaković and Matei Fischinger. CP Oct. 94, p436-453.

Old Concrete Slab Bridges. I: Experimental Investigation, A. Azizinamini, T. E. Boothby, Y. Shekar and G. Barnhill, ST Nov. 94, p3284-3304.

Old Concrete Slab Bridges. II: Analysis, A. Azizinamini, Y. Shekar, T. E. Boothby and G. Barnhill, ST Nov. 94, p3305-3319.

Postcracking Formulation for Analysis of RC Structures Based on Secant Stiffness, Ananth Ramaswamy, F. Barzegar and G. Z. Voyiadjis, EM Dec. 94, p2621-2640.

Predicting Strength Variability of Concrete Offshore Structures, Perry Adebar, Ricardo Foschi and Felix Yao, ST July 94, p2108-2122.

Progress in Reinforced Concrete Column Design, R. Green, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p455-460.

Progress in Reinforced Concrete Column Design: An Introduction, S. Ali Mirza, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p429-431.

Pullout of Inclined Fibers from Cementitious Matrix, C. Ouyang, A. Pacios and S. P. Shah, EM Dec. 94, p2641-

Punching Shear of Reinforced Concrete Shell Structures, Gajanan M. Sabnis and Amjad A. Shadid, (*Spatial, Lattice and Tension Structures*, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p907-

Punching Shear Strength of Steel Fiber Reinforced Concrete Slabs, Kiang-Hwee Tan and P. Paramasivam, MT May 94, p240-253. 123

Rational Limits for Longitudinal Steel in Concrete Columns, ASCE-ACI Committee 441-Concrete Columns, Subcommittee on Longitudinal Reinforcement Limits, (Furlong, Richard W., chmn.), (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p438-443

RC Beam-Column Element for Nonlinear Frame Analysis, Enrico Spacone and Filip C. Filippou, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p155-164.

Recent Advances in Biaxially Loaded Columns, ASCE ACI Committee 441, Subcommittee on Biaxially Loaded Columns, (Hsu, C. T. T., chmn.), (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p450-454.

Recent Developments in Seismic Response of Composite Structures, Bahram M. Shahrooz, David A. Kramer and Mark E. Remmetter, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p158-163.

Reinforced Concrete Beams with Plates Glued to Their Soffits, Deric John Oehlers, ST Aug. 92, p2023-2038.

Reinforced-Concrete Dimensioning Based on Element Nodal Forces, E. Anderheggen, Z. Despot, P. Steffen and S. M. R. Tabatabai, ST June 94, p1718-1731.

Reliability and Response Control of R/C Buildings. S. Ang and D. de Leon, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1593-1599. Reliability Assessment of Continuously Reinforced Con-

crete Pavements, Angela J. Weissmann, B. Frank McCullough and W. Ronald Hudson, TE Mar./Apr. 94,

Reliability of Short and Slender Reinforced-Concrete Columns, Sonia E. Ruiz and J. Cipriano Aguilar, ST June 94, p1850-1865.

Repair of a Cracked Cooling Tower Shell Based on Numerical Simulations, Thomas Huemer, Christian Kropik, Herbert A. Mang and Günther Meschke, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p887-

Research of Strength and Deformations with Long-time Loading and the Use of Glassfiber Reinforced Concrete in Shells, G. K. Khaidukov and M. M. Lachinov, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p340-349.

Rotating Crack Model and Fracture in a R/C Medium, Azadeh Parvin and Theodore G. Toridis, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1944-1950.

Seismic Analysis of Reinforced Concrete Building Using Finite-element Techniques, Tom Panayotido and Jayant Vir, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1091-1098.

Seismic Behavior of Non-Ductile Concrete Frame Structures, Yahya C. Kurama, Stephen P. Pessiki, Richard Sause and Shaojie Wu, (Structures Congress XII, N. C.

Sause and Snaojie Wu, (Structures Congress XII, N. C.
Baker, ed. and Barry J. Loodno, ed., 1994), p1496-1501.
Seismic Design of RC Structural Walls with Unsymmetrical Cross-Sections, John W. Wallace and Sharon L.
Wood, (Structures Congress XII, N. C. Baker, ed. and
Barry J. Loodno, ed., 1994), p43-48.
Seismic Performance of Steel-Encased Composite Col-

umns, James M. Ricles and Shannon D. Paboojian, ST Aug. 94, p2474-2494.

Seismic Response and Retrofitting of Non-Ductile Reinforced Concrete Bridges, James Ricles, Yueh-Shiun Yang and M. J. Nigel Priestley, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1226-1231.

Seismic Retrofit of Existing Reinforced Concrete Columns by Glass-Fiber Composites, L. Jin, H. Saadatmanesh and M. R. Ehsani, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p753-763.

Seismic Retrofit of R/C Columns with Inadequate Lap Splices, R. S. Aboutaha, M. D. Engelhardt, J. O. Jirsa and M. E. Kreger, (*Structures Congress XII*, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1502-1507.

Seismic Shear Strength of Reinforced Concrete Columns, M. J. Nigel Priestley, Ravindra Verma and Yan Xiao, ST Aug. 94, p2310-2329.

Seismic Vulnerability of Flat Slab - Core Buildings, Somaprasad R. Hosahalli and Ahmet E. Aktan, ST Feb. 94, p339-359.

A Shear-Flexure Model for Non-Ductile Reinforced Concrete Bridge Columns under Biaxial Seismic Loading, Yueh-Shiun Yang, James Ricles and M. J. Nigel Priestley, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1232-1237.

Shock-tested R. C. Slabs: Significant Parameters, François Toutlemonde and Pierre Rossi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p227-232

Simulated Seismic Load Tests on Reinforced Concrete Columns, S. Watson and R. Park, ST June 94, p1825-

1649.
Small Diameter Fibers/Micro Fibers for Reinforcement of Thin Sheet Products, Ziad Bayasi and Jack Zeng, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), 7380-385.
Spalling of Continuously Reinforced Concrete Pavements,

Dan G. Zollinger, Sanjaya P. Senadheera and Tianxi Tang, TE May/June 94, p394-411.

Spatial Structures Erected out of Thin Shell Elements Fab ricated on Plane Followed by Bending, Vladimir V. Shugaev, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p867-876.

Specimen Geometry and Toughness of Steel-Fiber-Reinforced Concrete, Lianrong Chen, Sidney Mindess and Dudley R. Morgan, MT Nov. 94, p529-541.

Stable Reinforced-Concrete Section-Analysis Procedure, C. R. Thewalt and B. Stojadinović, ST Oct. 94, p3012-3024

Steel-Concrete Interaction by Means of Film Sensors, Marco di Prisco and Alessandro Gandelli, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p815-820.

Steel-Deck-Reinforced Concrete Diaphragms. I, W. Samuel Easterling and Max L. Porter, ST Feb. 94, p560-576. Steel-Deck-Reinforced Concrete Diaphragms. II, W. Samuel Easterling and Max L. Porter, ST Feb. 94,

Stiffness of Low Rise Reinforced Concrete Shear Walls, Working Group on the Stiffness of Concrete Shear Wall Structures, Structural Division, ASCE, (R.C. Murray, chm.), 1994, 0-7844-0060-1, 196pp. Strength of FRC Corbels in Flexure, Nijad I. Fattuhi, ST

Feb. 94, p360-377.
Structural Reliability Analysis of Masonry Shear Walls,

George T. Zorapapel, Gary C. Hart and Dan M. Frango-pol, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p205-210. Study on Reinforced Concrete Cylindrical Shells with

Edge Members under Impact Loading, Kazuhiko Mashita, Hidehiro Yoshitake, Masaya Noguchi and Masatoshi Hotta, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p847-856.

Test for Polymer Overlay Interface on Concrete, Brian M. Deming, Haluk Aktan and Mumtaz Usmen, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p709-715.

Tests of Yielding Anchorages Under Monotonic Loadings John F. Bonacci and Jorge Marquez, ST Mar. 94, p987-997

Time-Dependent Behavior of RC Members Strengthened With FRP Laminates, Nikolaos Plevris and Thanasis C. Triantafillou, ST Mar. 94, p1016-1042.

Toughness Characterization of Steel-Fiber Reinforced Concrete, Jean-Francois Trottier and Nemkumar Banthia, MT May 94, p264-289.

Ultimate Strength of R/C Cooling Tower Shell, Takashi Hara, Shiro Kato and Hiroshi Nakamura, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p877-886

The Use of High Performance Fiber Reinforced Cement Composites for Seismic Rehabilitation, Neven Krstulo-vic-Opara, Chia-Ming Uang and Abdol Haghayeghi, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p812-819. Velocity Control Rings for RC Pipe on Steep Slopes, Glen Drogin, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p928-932

Welded Wire Fabric for Bridges II. : Fatigue Strength, Bilal M. Ayyub, Peter C. Chang and Naji A. Al-Mutairi, ST June 94, p1882-1892.

Welded Wire Fabric for Bridges. I: Ultimate Strength and Ductility, Bilal M. Ayyub, Peter C. Chang and Naji A. Al-Mutairi, ST June 94, p1866-1881.

Concrete, steam cured

Recycled Material, William A. Mallow, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p828-835.

Concretes

High- and Ultrahigh-Performance Concretes Are Ready to Rehearse, ET Apr./May 94, p1,4-5.

Conditional probability Conditioned Stochastic Processes for Conditional Random Fields, Hiroyuki Kameda and Hitoshi Morikawa, EM Apr. 94, p855-875.

Cone penetration tests

Calibration Chamber Studies of Piezocone Test in Cohesive Soils, P. U. Kurup, G. Z. Voyiadjis and M. T. Tumay, GT Jan. 94, p81-107.

Cover-Subsidence Sinkhole Evaluation of State Road 434.

Longwood, Florida, Jon Foshee and Brian Bixler, GT

Nov. 94, p2026-2040.

CPT-Based Prediction of Footing Response, Paul W. Mayne, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p214-218.

Estimation of Settlements of Shallow Foundations, M. Surendra, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and

Robert M. Gibbens, ed., 1994), p153-156.

Hydraulic Conductivity Assessment of Slurry Wall Using Piezocone Test, M. Manassero, GT Oct. 94, p1725-1746. The Influence of Engineering Judgement in the Settlement Analysis of a Test Fill Near Châlon-sur-Saône, France, Jean-Pierre Demartinecourt and Jean-Pierre Rajot, (Vertical and Horizontal Deformations of Foundations and

Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p897-910. Laboratory and Field Leaching Tests on Coastal Salt-Bearing Soils, Nabil F. Ismael, GT Mar. 93, p453-470.

Prediction of Foundation Load/Settlement Characteristics, John Scott and Keith Nicholls, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p177-

Predictions of Shallow Foundation Behavior for Settlement '94, Storer J. Boone, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p168-172

Site Investigation Surveys for Dredging Projects, S. J. Plasman and J. Peuchen, (*Dredging '94*, E. Clark McNair,

Jr., ed., 1994), p322-331.

Spread Footing Prediction Event at the National Geotechnical Experimentation Site on the Texas A&M University Riverside Campus, David Thomas, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p149-152.

The Tip Displacement of Drilled Shafts in Sands, V. N. Ghionna, M. Jamiolkowski, S. Pedroni and R. Salgado, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1039-1057.

UF Spread Footing Prediction, F. C. Townsend, P. Ruesta and R. Morgan, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p182-185.

The Usefulness of Stone Columns to Reduce Settlements and Distortions - A Case History, Enrico Brignoli, Angelo Garassino and Pietro Renzo, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p561-570.

Conferences

Bridge Designs Look to Future, Remember Past, CE Aug. 94, p12-13.

Opening Remarks by Robert L. Wiegel, Robert L. Wiegel, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p194-

Public-Sector Project Politics Assailed, CE Aug. 94, p21. Taking Environmental Tech to Market, ET Oct./Nov. 94,

Water: Ways to Save, CE Feb. 94, p21-22.

Confidence intervals

Case Studies of Extreme Wave Analysis: A Comparative Analysis, Gerbrant van Vledder, Yoshimi Goda, Peter Hawkes, Etienne Mansard, Maria Jesus Martin, Martin Mathiesen, Eric Peltier and Edward Thompson, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p978-992.

Flow-Duration Curves I: New Interpretation and Confidence Intervals, Richard M. Vogel and Neil M.

Fennessey, WR July/Aug. 94, p485-504.

Confidence limit

Evaluating an Autoregressive Model for Stream Flow Forecasting, Yuan Cheng, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1105-1109.

Configuration

Automatic Truss Design by Optimized Growth, William Keith Rule, ST Oct. 94, p3063-3070.

Evolutionary Methods for Synthesis of Truss Topology, Fang Zhao, Sushil J. Louis and Mihaly Lenart, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1816-1823.

Explorations in Geodesic Forms, Dimitra Tzourmakliotou, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p440-449.

A Version and Configuration Scheme for Collaborative Engineering, Karthik Krishnamurthy and Kincho Law, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2022-2029.

Confinement

The Assessment of Future Human Actions at Radioactive Waste Disposal Sites: An International Perspective, D. R. Anderson, D. A. Galson and E. S. Patera, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1286-1291.

Confining Reinforcement for Concrete Columns, S. Wat-son, F. A. Zahn and R. Park, ST June 94, p1798-1824.

Dewatering and Crust Management of Confined Disposal Areas in Galveston Bay, Texas, Richard F. Thomas, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1400-1405.

Effect of Materials Architecture on Strengthening Efficiency of Composite Wraps for Deteriorating Columns in the North-East, I. Howie and V. M. Karbhari, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p199-206.

Effects of Confinement on Concrete Columns: Plasticity Approach, A. I. Karabinis and P. D. Kiousis, ST Sept.

94, p2747-2767.

Finite Element Modeling of Concrete Expansion and Confinement, F. J. Vecchio, ST Sept. 92, p2390-2406.

Groundwater Model Simulation of Chemical Transport from a Nearshore Confined Sediment Disposal Facility, Michael Riley, Gopal Biswas, Charles Boatman, Robert Brockhaus, Mark Utting and Doug Hotchkiss, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1517-1526.

Influence of Concrete Tensile Ductility on Compressive Strength of Confined Columns, L. Bortolotti, MT Nov.

94, p542-563.

Seepage through Dike Walls of the Chicago Confined Disposal Facility, D. D. Reible, S. A. Savant-Malhiet, L. J. Thibodeaux, K. T. Valsaraj and T. E. Myers, (*Dredging* '94, E. Clark McNair, Jr., ed., 1994), p1490-1496.

Simulated Seismic Load Tests on Reinforced Concrete Columns, S. Watson and R. Park, ST June 94, p1825-

Static Response of Fiberglass Pretensioned Columns, Mohsen Issa, Rajan Sen, Daniel Mariscal and Mohsen

Shahawy, ST Dec. 94, p3634-3648.

Using Performance Assessment for Radioactive Waste Disposal Decision Making-Implementation of the Methodology into the Third Performance Assessment Iteration of the Greater Confinement Disposal Site, David P. Gal-legos, Stephen H. Conrad and Thomas A. Baer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1671-1681

Conflict

Conflict Management Using SHARED-DRIMS, Feniosky Peña-Mora, Duvvuru Sriram and Robert Logcher, (Com uting in Civil Engineering, Khalil Khozeimeh, ed.,

1994), p1599-1606.

Cooperative Game Theory in Water Resources, Morris Israel, Jay R. Lund and Gerald T. Orlob, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p569-572. The Declaration of Codependence, CE Aug. 94, p8.

Dispute Resolution Giving Way to Dispute Prevention, CE

Apr. 94, p20.

Geotechnical Baseline Reports, Teresa Austin, CE Dec. 94. p56-57

Interdiscipline Design Coordination Facilitated by CADD, James W. Langston, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1983-1989. Interpretation of Construction Contracts, H. Randolph Thomas, Gary R. Smith and Robert E. Mellott, CO June

94, p321-336.

More Than an Underground Success, James Denning, CE

Dec. 93, p42-45.

Conflict of interest Do Endangered Species Endanger Projects?, CE June 94, p12,14.

Conformal mapping Seepage from Canal to Asymmetric Drainages, Abate T. Wolde-Kirkos and A. S. Chawla, IR Sept./Oct. 94, p949-956.

Stresses in Anisotropic Rock Mass with Irregular Topography, Ernian Pan and Bernard Amadei, EM Jan. 94, p97-

Conical bodies

Cone Models for Embedded Foundation, Jethro W. Meek and John P. Wolf, GT Jan. 94, p60-80.

Cone-Cylinder Intersection under Pressure: Axisymmetric Failure, Jin-Guang Teng, EM Sept. 94, p1896-1912.

Connecticut

Connecticut Bridge-Deck is Weekend Wonder, CE Dec. 94, p21,23.

Connections

Application of Concrete-Filled Steel Tubular Columns in Tall Buildings in Earthquake Area, Chahg-Ji Gong, Xi Lin and Shao-Huai Cai, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p146-151.

ATLSS Connections with Moment Capacity, Richard B. Garlock, Le-Wu Lu and B. Vincent Viscomi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p743-748.

Band Width in Joint Adjustment of Geodetic Networks Having Common Points, Olcay Öztan, Yunus Kalkan, Zafer Kızılsu and Ufuk Özerman, SU Feb. 94, p3-10.

Connections for Pultruded Composites: A Review and Evaluation, Ayman S. Mosallam, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1001-1017.

Creep Effects in Composite Beams with Flexible Shear Connectors, Angelo Marcello Tarantino and Luigino

Dezi, ST Aug. 92, p2063-2081.

Cyclic Performance of Riveted Connections, Roberto Leon, Gabriel P. Forcier, Charles W. Roeder and F. Robert Precec, (Structure Songress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1490-1495.

Cyclic Testing of Pultruded Fiber-Reinforced Plastic Beam-Column Rigid Connection, Michel Bruneau and David Walker, ST Sept. 94, p2637-2652.

Debating Steel - Connection Design, Alexander Newman, CE Feb. 94, p52-55.

Developing Standardized Connection Analysis Techniques for Slim Hole Core Rod Designs, Gregory Fehr and Edmond I. Bailey, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1048-1054.

Effectiveness of Storm Shutters in Hurricane Damage Prevention, Raja R. A. Issa, Camille A. Issa, Ajay Shanker and Paul Gencorelli, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p486-495.

Elastic Buckling Strength of Gusset Plate Connections, J. J. Roger Cheng, Michael C. H. Yam and S. Z. Hu, ST Feb. 94, p538-559.

Equivalent Continuum Model for Deployable Flat Lattice Structures, Charis Gantes, Jerome J. Connor and Robert

D. Logcher, AS Jan. 94, p72-91.

Erectable Truss Hardware for Large Space Structures, Ray-mond E. Dick, Terry N. Faddis and Bill G. Barr, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p414-422

Externally Stiffened I-Beam to Box-Column Connections, N. E. Shanmugam, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p719-724.

Fracture Analysis of Bolted Timber Connections, Smith and Lin J. Hu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p912-917.

Investigating the Behavior of a Lattice Structural Section, L. Shan and M. Hanson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p725-730.

Investigation of Dry-Weather Pollutant Entries Into

Storm-Drainage Systems, Richard Field, Robert Pitt, Melinda Lalor, Michael Brown, William Vilkelis and Edward Phackston, EE Sept./Oct. 94, p1044-1066

Modeling of Cyclic Moment-Rotation Response of Double-Angle Connections, Mario De Stefano, Antonello De Luca and Abolhassan Astaneh-Asl, ST Jan. 94, p212-

Moment-Rotation Behavior of Pultruded Beam-to-Column Connections, J. T. Mottram and A. J. Bass, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p423-428.

Overview - Electrical Substation Structures Design Guide, Leon Kempner, Jr., (Structures Congress XII, N. C Baker, ed. and Barry J. Loodno, ed., 1994), p597-600.

Proposed Test Method for Determining Bending Yield Moment of Nails, John H. Showalter, Jr. and David G. Pollock, Jr., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p918-922.

Reliability of Light-Gage Metal Joist Hangers, Francis O. Berkoh and Juan J. Salinas, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p906-

Seismic Behavior of Type PR Steel Frames, K. S. Sivakumaran and Sanjiang Chen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p585-590.

Seismic Rehab Continues on Steel-Framed Buildings, CE Oct. 94, p12,14.

Shear Connection in Haunched Composite Beams with Sloping Sides, Deric John Oehlers and Sung Moo Park, ST July 94, p2227-2232. Special Considerations in the Design of Connections for

Recycled Wood/Plastic Composite Lumber, George H. Kyanka, (Structures Congress XII, N. C. Baker, ed. and

National Condinues Congress 201, Nr. C. Baker, et al. Barry J. Loodno, ed., 1994), p929-933.

Validation of the European Yield Model for Nailed Connections, Steve G. Winistorfer, (Structures Congress XII., N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p923-928

Connections, bolted

Bolted Connections for GFRP Laminated Structural Members, Nahla K. Hassan, Charles N. Rosner and Sami H. Rizkalla, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1018-1025.

Modelling of Extended Endplate Bolted Connections, Mohammed R. Bahaari and Archibald N. Sherbourne, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p731-736.

Connections, joints

Cyclic Behavior of Joints Between Steel Beams and Reinforced Concrete Columns, Ryoichi Kanno and Gregory G. Deierlein, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1137-1142.

Lateral and Withdrawal Strength of Nail Connections for Manufactured Housing, Steve G. Winistorfer and Law-rence A. Soltis, ST Dec. 94, p3577-3594.

Connectors, mechanical

ATLSS Connections with Moment Capacity, Richard B. Garlock, Le-Wu Lu and B. Vincent Viscomi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p743-748.

ATLSS Connectors in Semi-Rigid Composite Connections, ATLSS Connectors in senin-register Composer Connectoring, Alan M. Rosa, Le-Wu Lu and B. Vincent Viscomi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1149-1154.

Characteristics of Mechanical Connectors for Construction

of FRP Structures, Ed (Ahmed) Morsi and J. Larralde, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p991-1000.

Creep Analysis of Composite Steel-Concrete Members with Deformable Connectors, F. Mola, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p737-742.

The Effects of Bolt Over-Tightening on Bolted Connections, Edwin R. Schmeckpeper, Richard J. Nielsen and Guy Gentry, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p713-718.

Use of Composite Timber-concrete Floors in Residential Buildings, B. H. Ahmadi and M. P. Saka, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p508-513.

Conservation

Agriculture and Soil Conservation, Billy M. Teels, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p211-218.

Applying Sustainable Development, Thomas E. Mitchell, CE Dec. 94, p62-64.

Engineering Sustainable Development, John Prendergast, CE Oct. 93, p39-42.

Impacts of Natural and Manmade Changes on the San Luis Rey River Environment, Chenchayya T. Bathala and W. Jeffery Moncrief, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p327-330.

Optimal Pump Operations Considering Pump Switches, Kevin E. Lansey and Kofi Awumah, WR Jan./Feb. 94,

p17-35.

Tampa Hopes to Stop City From Going Down the Drain, CE Mar. 94, p10,12.

Consistency

A Suggested International Classification of Marinas, Jon Guerry Taylor, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p140-143.

Consolidation

Anisotropy Studies on Cuboidal Shear Device, N. Sivakugan, J-L. Chameau and R. D. Holtz, GT June 93,

Application of the Phase Change Process to One-Dimensinal Consolidation Behavior of Peat, Keiji Kogure, (Vertical and Horizontal Deformations of Foundaguic, (Vertical and Indication Deformations of Polantations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p677-687. C./c. Concept Applied to Compression of Peat, Patrick J. Fox. Tuncer B. Edil and Li-Tus Lan, GT Aug. 92,

p1256-1263. Conical Test Load Measuring Compressibility, John H. Schmertmann, GT May 93, p965-971.

Consolidation Characteristics of an Offshore Clay Deposit,

J. A. R. Ortigao and A. S. F. J. Sayao, (Vertical and Horizontal Deformations of Foundations and Embankments, Yeung, ed. and Guy Y. Félio, ed., 1994), Albert T. p1415-1424.

Consolidation of Clay Layer: Hydrogeologic Boundary Conditions, Robert L. Schiffman, John M. McArthur and Robert E. Gibson, GT June 94, p1089-1093.

Consolidation of Ground Reclaimed by Inhomogeneous Clay, Hiroyuki Tanaka, (Vertical and Horizontal Defor-mations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1262-1273.

Discrete-Element Method for Simulating Behavior of Cohesive Soil, A. Anandarajah, GT Sept. 94, p1593-1613.

Equivalent Diameter of Vertical Drains With an Oblon Cross Section, Richard P. Long and Alvaro Covo, GT Sept. 94, p1625-1630.

Evaluation of Consolidation Behavior of Mine Tailings, K. J. L. Stone, M. F. Randolph, S. Toh and A. A. Sales, GT Mar. 94, p473-490.

Foundation Uniform Pressure and Soil-Structure Interaction, Rusk Masih, GT Nov. 94, p2064-2071.

Rate of Settlement of Silt Alluvium at Trojan, Derek H. Cornforth, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1460-1471.

Vacuum-Assisted Consolidation of a Hydraulic Landfill, A. Jacob, S. Thevanayagam and E. Kavazanjian, Jr., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio,

ed., 1994), p1249-1261.

Consolidation, soils

Consolidation Settlements and Pore Pressure Dissipation, Demetrious C. Koutsoftes and Raymond K. H. Cheung, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1100-1110.

Construction of an Island, Brendan Bambrick, CO Mar. 94,

p223-227.

Cyclic Loading for the Measuring of Soil Consolidation Parameters, Alain Vuez and Abdou Rahal, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p760-774.

Finite Strain Consolidation for Vertical Drains, R. Robert Goughnour, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p688-700.

Geotechnical Analysis of Capped Dredged Material Mounds, Armand J. Silva, Horst G. Brandes, Carl J. Uchytil, Thomas J. Fredette and Drew Carey, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p410-419

The Influence of Engineering Judgement in the Settlement Analysis of a Test Fill Near Châlon-sur-Saône, France, Jean-Pierre Demartinecourt and Jean-Pierre Rajot, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p897-910. Modeling Infiltration Into a Tuff Matrix From a Saturated

Vertical Fracture, Clifford K. Ho, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1897-1904.

Post-Cyclic Consolidation Behavior of Loose Sands, J. C. Chern and C. C. Lin, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert Yeung, ed. and Guy Y. Félio, ed., 1994), p740-747.
Preloading Organic Soils to Limit Future Settlements, K.

Peter Yu and Rudolph P. Frizzi, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p476-

490.

Research on the Consolidation of Mud, Erik Toorman and Marc Sas, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p430-439.

Residual Soil Settlment Related to the Weathering Profile, George F. Sowers, (Vertical and Horizontal Deformations) tions of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1689-1702.

Settlement of a Silo Subjected to Cyclic Loading, Marco Favaretti and Alberto Mazzucato, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p775-

Settlement of an Air Cargo Structure on Soft Clay, Mazen E. Adib and William G. Paratore, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p875Settlement Predictions at a Florida Port Facility, Thomas E. Selfridge and Kirk A. McIntosh, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p571-

Settlement Predictions Using Piezocone, J. R. Davie, H. Senapathy and W. Murphy, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p818-829.

Strip Drains in Dredged Material Placement Areas, Timo-thy D. Stark and Jack Fowler, (Dredging '94, E. Clark

McNair, Jr., ed., 1994), p420-429.

A Technique to Perform Coupled Consolidation Analysis
Using Two Independent Softwares, Jichun Sun, Harianto Rahardjo and Delwyn G. Fredlund, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p849-856.

Vacuum consolidation Technology-Principles and Field Experience, J. M. Cognon, I. Juran and S. Thevanay-agam, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1237-1248.

Constitutive equations

Fracture Energy Formulation for Inelastic Behavior of Plain Concrete, G. Etse and K. Willam, EM Sept. 94, p1983-2011.

Generalized Creep and Stress Relaxation Model for Clays, Ronaldo I. Borja, GT Nov. 92, p1765-1786.

Wave Attenuation in Elastic Continuum with Attenuating Neighborhood, Songtao Xue, Jun Tobita and Masanori Izumi, EM Mar. 94, p419-430.

Constitutive models

Analysis of Port Allen Lock in Elastic-Plastic Soil Medium, Hsi Chi Yang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p865-872.

Constitutive Theory of Interface Behavior in Quasi-Brittle Materials, H. Y. Yang and Ming L. Wang, EM Dec. 94,

nite-Element Simulation of Ice-Sheet Indentation, H. A. Khoo and T. M. Hrudey, EM June 94, p1322-1342

Implementation of a Viscoplastic, Kinematic Hardening Constitutive Model for Impact Prediction, Jeffrey R. Sachs, Charles S. White and Frederick C. Taverner, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p388-401.

Load-Settlement Prediction of Footings on Steep Slopes, Pedro Arduino, Emir J. Macari and Mark Gemperline, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y.

Félio, ed., 1994), p1385-1399.

Micromechanics Modeling for Stress-Strain Behavior of Granular Soils. II: Evaluation, Ching S. Chang, Mohammed G. Kabir and Yang Chang, GT Dec. 92, p1975-

Multiaxial Cyclic Plasticity Model for Clays, Ronaldo I. Borja and Alexander P. Amies, GT June 94, p1051-

Numerical Modeling of Bridge Approach Settlement with Foundation-Embankment Interaction, Musharraf Zaman, Dinesh Bhat and Joakim Laguros, (Vertical and Horizontal Deformations of Foundations and Embankments, Yeung, ed. and Guy Y. Félio, ed., 1994), Albert T. p1400-1414

Postcracking Formulation for Analysis of RC Structures Based on Secant Stiffness, Ananth Ramaswamy, F. Bar-zegar and G. Z. Voyiadjis, EM Dec. 94, p2621-2640.

Predictions of Footing Tests Sponsored by the FHWA Using a Strain Hardening Elastoplastic Constitutive Model, I. Shahrour and M. Zaher, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994),

Rate Dependent Plasticity and Damage for Concrete, V. P. Panoskaltsis, J. Lubliner and P. J. M. Monteiro, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p27-

Response Prediction of Granular Materials at Low Effective Stresses, Emir J. Macari-Pasqualino, Kenneth Runesson and Stein Sture, GT July 94, p1252-1268.

Rheological Characterization of Asphaltic Mixtures Under Repetitive Loading, Y. R. Kim and Y. C. Lee, (Infra-structure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p796-803.

D. Bastani, etc., 1974), pro-053.
Time-Dependent Load-Distribution Behavior of Parallel-Member Wood Systems, P. Hong, K. J. Fridley and D. V. Rosowsky, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1088-1093.

Unified Critical-State Bounding-Surface Plasticity Model for Soil, Roger S. Crouch, John P. Wolf and Yannis F. Dafalias, EM Nov. 94, p2251-2270.

Viscoplastic Response of Structures for Intense Local Heating, Earl A. Thornton and J. D. Kolenski, AS Jan. 94, p50-71.

Constitutive relations

Compression Response of Cracked Reinforced Concrete, F. J. Vecchio and M. P. Collins, ST Dec. 93, p3590-3610.

Discrete-Element Method for Simulating Behavior of Cohesive Soil, A. Anandarajah, GT Sept. 94, p1593-1613. Formulation of MIT-E3 Constitutive Model for Overcon-

rollidated for MT-E3 Constitutive Model for Overcions solidated Clays, Andrew J. Whittle and Michael J. Kav-vadas, GT Jan. 94, p173-198. Model Prediction of Anisotropic Behavior of Boston Blue Clay, Andrew J. Whittle, Don J. DeGroot, Charles C. Ladd and Tian-Ho Seah, GT Jan. 94, p199-224.

Alternative Decisions for Space-Based Scheduling in Multi-Story Projects, Walid Y. Thabet and Yvan J. Beliveau, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1164-1171.

Analysis of Potential Highway Routes to Yucca Mountain, Shashi K. Sathisan, Emelinda M. Parentela and Michael S. Lee, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1278-1285.

Case Storage of Planning Knowledge for Power Plant Construction, Ren-Jye Dzeng and Iris D. Tommelein, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p293-300.

Management Distributed Constraint on AEC Configurations, Sanjai Tiwari and H. C. Howard, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1607-1614.

A Formal Product/Process Model for Engineering, Albert Wong and D. Sriram, (Computing in Civil Engineering,

Khalil Khozeimeh, ed., 1994), p1481-1488

A Frame-Based Drawing Management System Based on Building Object Model, Gakuhito Hirasawa and Yusuke Yamazaki, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p555-562.

Global Network Optimization for Pavement Management, Kelvin C. P. Wang and John Zaniewski, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p474-

Hollow Bridge Fills Void, CE Feb. 94, p26. HVLS: Horizontal and Vertical Logic Scheduling for Multistory Projects, Walid Y. Thabet and Yvan J. Beliveau, CO Dec. 94, p875-892.

Objects: the CADD/GIS Common Denominator, Paul Scarponcini, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1764-1771.

Optimal Markup Policy in Sequential Competitive Bid-ding, Hongbin (Ben) Chen, Robert I. Carr and Photios G. Ioannou, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1548-1555.

Representation of Vertical Constraints Knowledge for Scheduling Multi-Story Projects, Walid Y. Thabet and Yvan Beliveau, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p349-355.

Selecting Precast Concrete Building Systems, John I. Mess-ner, Victor E. Sanvido and Masaaki Ikeda, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p368-371 Stability of Masonry Piers and Arches Including Sliding, Thomas E. Boothby, EM Feb. 94, p304-319.

Vibration of Mindlin Plates on Point Supports Using Constraint Functions, K. M. Liew, Y. Xiang, S. Kitipornchai and M. K. Lim, EM Mar. 94, p499-513.

Width and Depth-Constrained Best Trapezoidal Section, David C. Froehlich, IR July/Aug. 94, p828-835.

Outfall, E. Eric Adams, Dipak Sahoo, Christopher R. Liro and Xueyong Zhang, HY Feb. 94, p209-226.

Recent Improvement of Gao Qiao New Channel on Huang-pu River, Guoxian Zhu, WW July/Aug. 94, p368-381.

Constructibility

Constructionity
Barriers to Constructability Implementation, James T.
O'Connor and Steven J. Miller, CF May 94, p110-128.
Case Study of Burlington Cable-Stayed Bridge, Kevin E. Swiggum, Stuart D. Anderson and Jeffrey S. Russell, CO

Sept. 94, p649-666.

Comparative Analysis of Three Constructability Approaches, Jeffrey S. Russell, John G. Gugel and Michael W. Radtke, CO Mar. 94, p180-195.

Constructability Programs: Method for Assessment and Benchmarking, James T. O'Connor and Steven J. Miller,

CF Feb. 94, p46-64.

Constructability Related to TQM, Value Engineering, and Cost/Benefits, Jeffrey S. Russell, Kevin E. Swiggum, Jeffrey M. Shapiro and Achmad F. Alaydrus, CF Feb. 94, p31-45.

94, p.31-45.
The Key is Constructability, William J. Schmitz and Theodore von Rosenvinge, IV, CE Aug. 94, p54-56.
Model for Constructability Approach Selection, John G. Gugel and Jeffrey S. Russell, CO Sept. 94, p509-521.

Construction

Advice to Young Construction Engineers, ME Jan./Feb.

94, p11.

Alternative Decisions for Space-Based Scheduling in Multi-Story Projects, Walid Y. Thabet and Yvan J. Beliveau, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1164-1171.

Analogy-Based Solution to Markup Estimation Problem, Tarek Hegazy and Osama Moselhi, CP Jan. 94, p72-87. Application of Pen Computing to Construction Inspection,

Application of Pen Computing to Construction Inspection, Jason M. Jazayeri, Farid Jazayeri and Katherine Litchfield, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1438-1445.
Applying Multimedia Technology to Project Control, L. Y. Liu, A. L. Stumpf and S. S. Kim, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p608-613. Applying Portable Computing and Hypermedia to Con-struction, Trefor P. Williams, ME May/June 94, p41-45.

struction, Terior P. Williams, Mr. MayJune 94, p41-45. Aquifer Storage and Recovery in the Floridan Aquifer Sys-tem of South Florida, Albert Muniz and William B. Ziegler, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel,

ed., 1994), p69-72.

ARIANE-5 Launch Operations Construction and Operation of a New Launch Complex for Lower Cost, Higher Reliability Missions, Juan de Dalmau, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1521-1537

Assembly of Simulation Networks Using Designs, Plans, and Methods, I. D. Tommelein, R. I. Carr and A. M.

Odeh, CO Dec. 94, p796-815.

Automation and Robotics Opportunities: Construction Versus Manufacturing, John G. Everett and Alexander H. Slocum, CO June 94, p443-452.

Bechtel Automated Lift Planning System, Craig Bennett and Steve Ditlinger, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p401-409.

Beliefs about Hurricane Andrew, Construction, and Evacuation, Earl J. Baker, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A.

Cook, ed. and Mehrdad Sotani, ed., 1994), p31-36.
Building Procurement by Design and Build Approach, Issaka Ndekugri and Adrian Turner, CO June 94, p243-

Building Product Model, A First Brick in Computer Inte-grated Construction, Michael J. Riley and Hamid H. R. Sabet, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p767-777.

Cable-Based Lunar Transportation System, Leonhard E. Bernold, AS Jan. 94, p1-16.

Can You Top This?, CE Aug. 94, p8.

Capturing As-built Project Information for Facility Man-Capturing As-buill Project Information for Facility Management, L. Y. Liu, A. L. Stumpf, S. S. Kim and F. M. Zbinden, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p614-621.
Case Storage of Planning Knowledge for Power Plant Construction, Ren-Jye Dzeng and Iris D. Tommelein, (Computing in Civil Engineering, Khalil Khozeimeh, ed.,

1994), p293-300. Casino Construction All Aces in Las Vegas, CE Feb. 94,

p10.

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Checklist of Critical Success Factors for Building Projects, M. K. Parfitt and V. E. Sanvido, ME July 93, p243-249. Community Partnering in Accelerated Construction Program, Leslie R. Henley, UP June 94, p74-86.

Compaction of Lunar-Type Soil, Leonhard E. Bernold, AS

Compaction of Lunar-Type Soil, Leonhard E. Bernold, AS Apr. 94, p175-187.
Computer-Assisted Planning, Programming, Budgeting System (CAPPB), Bruce C. Goettel, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p390-395.
Computerized Facility Information Management Systems, Mike Tidwell and Cal Leckington, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p396-401.

Conceptual Models of Product, Project and Document Data; Essential Ingredients of CIC, Bo-Christer Björk, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p980-987

Conflict Management Using SHARED-DRIMS, Feniosky Peña-Mora, Duvvuru Sriram and Robert Logcher, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1599-1606.

Constraint Management on Distributed Configurations, Sanjai Tiwari and H. C. Howard, (Computing in Civil Engineering, Khalil Khozeimeh. ed.. 1994), p1607-1614.

Construction Estimating Software, Marc T. Pritchard, Tim Culligan and Rick Kimble, CC Feb. 94, pl-6. Construction Expertise Transfer with Knowledge Based Systems, Hans Björnsson and Bjarni P. Hjaroar, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p964-971.

Construction Facilities Audit: Quality System-Performance Control, Allan F. Samuels, ME July/Aug. 94, p60-65.

Construction Monitoring Activities in the ESF Starter Tunnel, John Pott and Scott Carlisle, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1993-1998.

Construction of a Cofferdam Pressure Relief System, J. Taylor, W. L. Galbraith, G. Richters, J. E. Baka and C. C. Chang, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p93-111. Construction of a Lunar Base, Dave Torres, (Engineering,

Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p799-803.
Construction Operations on the OUTPOST Platform in

Orbit, Thomas C. Taylor, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p423-432.

Construction Problem Solving in a Cooperative Distributed Agent Environment, Barry Jones and Mike Riley, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p79-87.

Construction Robot Force Control in Cleaning Operations, Y. Zhou and M. J. Skibniewski, AS Jan. 94, p33-49. Contemporaneous Development of Field Data: Transportation Construction Claim Defense, Kenneth H. Dunne and George Navarrete, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2124-2135.
Contract Awarded for Canadian Bridge, CE Jan. 94, p8.

Cost-Schedule Integration for Cash-Flow Forecasting Ronie Navon, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1536-1539.

Countdown to the Olympics Begins in Atlanta, CE June

94, p16. Creating and Abstracting Lessons-Learned from BCO Reviews, Michael C. Fu and E. William East, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p1146-1155. Creating Construction Documents from 3-D Computer Models, Margaret T. Neggers, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1326-1331. Critique on Building Envelope Sessions, Peter R. Sparks, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p529-532.

tani, ed., 1994, p.259-352.
Critique: Rebuilding and Recovery, Ben L. Sill, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed.,

1994), p300-302.

DBID: Analogy-Based DSS for Bidding in Construction, Osama Moselhi, Tarek Hegazy and Paul Fazio, CO Sept. 93 n466-479

Deer Island Hydropower Plant Fueled By Wastewater, CE

Mar. 94, p14.

Denver International Airport Tensile Roof Case Study: The Fabrication and Construction Process, Martin L. Brown, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p969-978.

Deployable Mesh Reflector, Z. You and S. Pellegrino,

(Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed.,

1994), p103-112.

Design and Analysis of the 712 Fifth Avenue Structure. Louis A. Occhicone and Stanley Wojnowski, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p1556-1561.

Design and Construction Deficiencies and Building Code Adherence, Mohammed S. Khan and Wimal Suaris, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p133-146.

Design and Construction of Post-Tensioned Concrete Floor Systems, D. Kirk Harman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1403-

1408.

Design and Construction of the Cable-Staved Wooden Space Truss Roof, Kei Sadakata and Hong Wan, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p810-819.

polio-819.
The Design of a Proactive Cost Feedback System for Construction Project Management, David N. Ford and Feniosky Pena, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), pl365-1372.
Design Techniques for Rectangular Lunar Modules, Mark E Schoedor, Philip Lighter and Jim Dav. (Engineer.

E. Schroeder, Philip J. Richter and Jim Day, (Engineering, Construction, and Operations in Space IV, Rodney Galloway, ed. and Stanley Lokaj, ed., 1994), p176-185.

Developing Specifications for Cellular-Telephone Base Stations, John C. Woolery, CO Sept. 94, p593-602

Distributional Information for Ejection Fragments, Eric P. Steinberg, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p402-413.

Do Endangered Species Endanger Projects?, CE June 94,

p12,14.

Dulles International Airport Construction Challenges, Christopher P. Hinker, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994),

p26-29.

The Effect of Mobile Transporter Motion on the Space Sta tion Attitude Control System, Tsay-Hsin G. Hu, Jalal Mapar and Ben C. Barker, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p453-462. Engineering, Construction, and Operations in Space IV, 2

vols, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994, 0-87262-937-6, 1560pp. Erectable Truss Hardware for Large Space Structures, Ray-

mond E. Dick, Terry N. Faddis and Bill G. Barr, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p414-422

Estimating Clay Liner and Cover Permeability Using Comweeraratne and Kris Khilnani, (Computing in Civil En-gineering, Khalil Khozeimeh, ed., 1994), p115-122.

Estimating Construction Productivity: Neural-Network-Based Approach, Li-Chung Chao and Miroslaw J. Skib-niewski, CP Apr. 94, p234-251.

Exploratory Studies Facility Test Implementation and Integration with Construction and Design, Deirdre M. Boak, Ned Z. Elkins, Richard Kovach and Ronald D. Oliver, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1770-1773.

Five Steps to Resolving Construction Disputes-Without Litigation, Richard H. Steen, ME July/Aug. 94, p19-23.

For Hospital, Nowhere to Go but Up, CE Apr. 94, p16,19. Fuzzy Modus Ponens Deduction Technique for Construction Scheduling, Ricky Wai-Kin Wu and Fabian C. Hadipriono, CO Mar. 94, p162-179.

Generalized Object Control and Assembly for Space Ro-bots, Jeff Russakow and Stephen Rock, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and

Chattering Environments, Latter A. Denisect, ed. and Paul R. Klarer, ed., 1994), p149-157. Georgia Dome Cable Roof Construction Techniques, We-ley R. Terry, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U.

Penalba, ed., 1994), p563-572.

A Goal Driven Approach to Discrete Event Simulation, Abdullah M. Alsugair and David Y. Chang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p515-522.

Gothic Structure and Design: Narbonne Cathedral, Vivian Paul and Robert Warden, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1568.

Graphic Visualization for Planning Heavy Lifts, Parmanand V. Dharwadkar, Koshy Varghese, James T. O'Connor and Thomas M. Gatton, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p759-766.

Graphical-Based Productivity Transient Investigation Using DISCO, Rong-Yau Huang and Jorge A. Vanegas, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p1-8.

Helium-Supported Hangar for a Small Solar-Powered Airship, Rosemarie Wagner and Bernd Kröplin, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p592-601.

Hexagonal Prison, The Shape of Things to Come, CE June 94, p12.

Humanware, Human Error, and Hiyari-Hat: A Template of Unsafe Symptoms, Shigeomi Nishigaki, Jeannette Vav-rin, Noriaki Kano, Toshiro Haga, John C. Kunz and Kin-cho Law, CO June 94, p421-442.

Hurricane Andrew - Structural Performance of Buildings in South Florida, Edward L. Keith and John D. Rose, CF

Aug. 94, p178-191.

Hurricane Shelter Design Criteria for Public Schools, Ajay Shanker, R. Wayne Drummond, Raja R. Issa and Kalika Wamanacharya, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p233-240.

Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994, 0-7844-0024-5, 502pp.

A Hypermedia Constructability System, Bob McCullouch and Bob Patty, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1397-1404.

Hypertext and Claim Analysis, Geoffrey Bubbers and John Christian, CO Dec. 92, p716-730.

Implementation of an Object-Oriented Knowledge Repre-sentation Scheme for the Development of an Intelligent CAD Interface, Nabil Kartam, (Computing in Civil Engi-

neering, Khalil Khozeimeh, ed., 1994), p1772-1778.

Information Modeling and Applications, Victor E. Sanvido, Kirby A. Kuntz, Theodore D. Lynch, John I. Messner and David R. Riley, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p786-789.

Integrated Product Models, Charles M. Eastman, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p1188-1195.

Integrated System Environment Using an Object-Oriented Project Model with Multiple-Views, Kenji Ito, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1204-1211.

An International Knowledge Database for Ground Improvement Geo-Systems, C. John Yoon, Theva Thevanagayam and Han Juran, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p277-284.

130

Interpretation of Construction Contracts, H. Randolph Thomas, Gary R. Smith and Robert E. Mellott, CO June 94, p321-336.

Interpretive and Modelling Problems of Risk and Uncertainty in Bidding Techniques, David Eaton, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2038-2045

Iowa Paves an Information Highway, CE June 94, p27. The Job-Order Contracting Solution, Leif T. Erickson and

Patrick D. Murphy, CE Apr. 94, p68-70. JSC-1: A New Lunar Soil Simulant, David S. McKay, James L. Carter, Walter W. Boles, Carlton C. Allen and Judith H. Allton, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p857-866.

The Kinematic Design of a Robotic Large Space Structure Construction Service, Mark R. Routson, Jackson C. S. Yang and Thomas C. Taylor, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer,

ed., 1994), p229-238.

Knowledge Issues in Modeling, Hossam El-Bibany, (Computing in Civil Engineering, Khalil Khozeimeh, ed.,

1994), p579-583.

Knowledge-Based Design of Project-Procurement Process, R. A. Mohsini, CP Jan. 93, p107-122.

A Knowledge-Intensive Database System for Making Effective Use of Construction Lessons Learned, Nabil Kartam, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1139-1145.

Labor-Political Factors for International Firms in Developing Regions, Enno "Ed" Koehn and Frank Atuahene, EI Jan. 94, p41-49.

A League of Their Own, Paul Tarricone, CE May 94, p58-61

Lessons Learned from the Design, Construction and Oper-ation of Hydroelectric Facilities, Task Committee on Lessons Learned from the Design, Construction and Operation of Hydroelectric Facilities of the Hydropower Committee, Energy Division, ASCE, (Edward F. Carter, chmn.), 1994, 0-7844-0000-8, 105pp.

Linguistic Analysis of Risk in Project Planning, Roozbeh Kangari and Moataz Bakheet, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p216-219.

Lunar Base Construction Using the Reinforce Earth Method with Geotextile, Mikiva Okumura, Yasuhiro Ohashi, Takao Ueno, Shojiro Motoyui and Kiosuke Murakawa, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1106-1115.

Machine learning Applications for Automated Constructa-bility Reviews, Kamolwan Lueprasert and Miroslaw J. Skibniewski, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p893-900.

Making an Olympic Stadium and a Baseball Park, Scott W. Braley and David P. Tabor, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p188-192

Marina Ashdod, Israel - An Investor's Turn-Key Project Design, Rami Raviv, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p244-247.

A Membrane Structure for a Lunar Assembly Building, Mark E. Schroeder and Philip J. Richter, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p186-195.

Methodology for Comparing Lunar Settlement Designs, Keith Trivelpiece, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p969-978.

Microgravity Research in a Space Station Environment, Steven D. Del Basso, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p473-482.

Microtunneling Arrives in San Diego as an Attractive Alternative to Open Trenching, William J. Swallow, III, (Infrastructure: New Materials and Methods of Repair,

Kim D. Basham, ed., 1994), p896-903.

A Mobile System for the Remote Assembly of Planetary Structures, P. T. Boissiere, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p278-285.

Modeling Operational Activities in Object-Oriented Simulation, Amr A. Oloufa, CP Jan. 93, p94-106.

Morphology of Reciprocal Frame Three-Dimensional Gril-lage Structures, John C. Chilton, Ban Seng Choo and Jia Yu, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1065-1074.

A Multi-Media System for Organizing Construction Documents, Rajaram Ganeshan, Simon Kim, Liang Liu and Annette Stumpf, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1381-1388. Multi-Objective Optimization of Construction Schedules,

Tadeusz Kasprowicz, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p185-190.

Multimedia Based System for Analyzing Production Organizations, Hans C. Björnsson and Per Sagert, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1405-1411. A Near-Term, Long-Duration, Lunar Outpost Design, S.

Sture, S. D. Jolly and J. Happel, (Engineering, Construc-tion, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p237-246.

Object Maps for Developing Automated Working Drawing Quality Control Procedures, M. Kevin Parfitt, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1787-1790.

An Object-Oriented Scheduling Data Acquisition Model Using a Hybrid Expert System, Kyungrai Kim, Calin M. Popescu and Gary D. Hamilton, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p356-361.

On "Solid" Golden Pond, Ronald J. Arceneaux and Dale L. Watson, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p170-179.

An Overview of A.S.C.E. Manual 50 "Planning and Design Guidelines for Small Craft Harbors", Fred A. Klancnik, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p196-200.

An Overview of the Analysis and Design Techniques Used on the Main Tunnels of the SSC, Steven H. Baldauf, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p1967-1974.

A Practical Design and Construction of Tension Rod Sup-Practical Design and Construction of Tension Rod Sup-ported Glazing, Torn Takeuchi, Haruyuki Kitamura, Kimiaki Harada, Kohei Higuchi, Akiho Harada and Mamoru Iwata, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p684-693.

Probabilistic Modeling of Scheduling Uncertainty: Methods and Tools, Ali Touran, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p380-383.

Prototype Applications of Integrated Data Models in Con-struction, M. Betts, P. Brandon, T. Child, G. Cooper and J. Kirkham, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p988-991. Quality Management of Earthwork Using Knowledge-

based Systems, Shrinath J. Kotdawala and Imad A. Basheer, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p426-429.

Quality Performance on Successful Project, W. B. Ledbetter, CO Mar. 94, p34-46. Quality-Measurement Matrix, James D. Stevens, Charles

Glagola and William B. Ledbetter, ME Nov./Dec. 94, p30-35.

Relocated Canal Leads to Future Reservoir, CE Feb. 94, p19-20.

Representation of Vertical Constraints Knowledge for Scheduling Multi-Story Projects, Walid Y. Thabet and Yvan Beliveau, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p349-355.

Research and Development — Why bother? Robert J. Tichy, (Structures Congress XII, N. C. Baker, ed. and

Barry J. Loodno, ed., 1994), p683-688.

Resource Recovery Facilities for Earth Approaching Comets, Thomas C. Taylor, Anthony C. Zuppero and Lucy-Ann McFadden, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p562-571.

ning and Flood Walls, U.S. Army Corps of Engineers,

1994, 0-87262-968-6, 320pp.

Robot for Interior-Finishing Works in Building: Feasibility Analysis, Abraham Warszawski and Yechiel Rosenfeld.

CO Mar. 94, p132-151.

Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994, 0-87262-913-9,

SCHEREC: SCHedule RECovery System, Feniosky Pēna, Robert Logcher, Naoto Mine and Timothy McManus, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p17-24.

Shelters for Hurricane Refuge, Herbert S. Saffir, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p241-248.

Simulating Learning Development for Construction, James D. Lutz. (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1655-1662.
Simulation of Learning Development in Repetitive Con-

Simulation of Learning Development in Repetitive Con-struction, James D. Lutz, Daniel W. Halpin and James R. Wilson, CO Dec. 94, p753-773. Simulation Verifies Queuing Program for Selecting Loader-Truck Fleets, Foad Farid

CO June 94, p386-404.

Spotting Trends in Design and Construction, ME Nov./

Standard for the Structural Design of Composite Slabs (ANSI/ASCE 3-91) Standard Practice for Construction and Inspection of Composite Slabs (ANSI/ASCE 9-91)

and inspection of Composite States (ArSA/ASCE 9-91) (St No. 91-003, 91-009), American Society of Civil Engineers, 1994, 0-87262-954-6, 90pp. Standards Processing 2000, Dana J. Vanier, J. Russell Thomas and Jamie L. Worling, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p137-144.

State and Resource Based Construction Process Simulation, Julio Martinez, Photios G. Ioannou and Robert I. Carr, (Computing in Civil Engineering, Khozeimeh, ed., 1994), p177-184.

Statistical Sample Size for Construction of Soil Liners, Craig H. Benson, Huaming Zhai and Salwa M. Rashad,

GT Oct. 94, p1704-1724.

Strategies for Technology Push: Lessons from Construction Innovations, C. H. Nam and C. B. Tatum, CO Sept. 92, p507-524.

Strategy for Computer Integrated Construction Technology, Paul Teicholz and Martin Fischer, CO Mar. 94, p117-131.

Strengthening the Design/Construction Interface Using Electronic Imaging, Document Management and Work Flow Technologies, Jorge A. Vanegas, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p600-

Structures Congress XII, 2 vols., N. C. Baker, ed. and Barry J. Loodno, ed., 1994, 0-87262-952-X, 1635pp.

Technology Framework for Computer-Integrated Construction, Paul Teicholz and Martin Fischer, CC Feb. 94,

Temporary Shoring Support Systems in an Urban Environ-ment, John E. Reinfurt, Thomas C. Anderson, Paul Reitz and Tony Licari, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p24-42. Tensile Structures Highlight New Denver Airport, Horst Berger and Edward M. DePaola, (Spatial, Lattice and

Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p957-968.

Transition from the Functional Requirements to the Technical Requirements Baseline, T. A. Mozhi, S. Douara, M. Senderling and T. Truong, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1641-1647.

Treatment of Uncertainty in the NRC Regulatory Process, J. Michael McGarry, III and F. Stanley Echols, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1404-1416.

The Use of ETFE Foils in Lightweight Roof Constructions, Craig Schwitter, (Spatial, Lattice and Tension Struc-tures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p622-631.

Using Computer Programs to Develop As-Built Schedules, Jason M. Jazayeri, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p191-196.

Water on Stone, Keri Wyatt Kent, WP Spring 94, p37-40.

"Dynamic Compaction Used as a Winter Construction Expedient", Lawrence F. Johnsen and Christopher Tonzi, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p68-79.

Construction companies

Computer-Based Risk Assessment of Competitive Procurement, Larry G. Crowley, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1540-1547.

Construction Process Innovation Through SMART Sys-tem, Yusuke Yamazaki and Junichiro Maeda, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1583-1590.

Optimal Markup Policy in Sequential Competitive Bid-ding, Hongbin (Ben) Chen, Robert I. Carr and Photios G. Ioannou, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1548-1555.

Qualification System for Building Engineers in Japan, Katsumi Yano, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p211-214.

Construction control

MoveCapPlan: In Integrated System for Planning and Controlling Construction Material Laydown and Handling, I. D. Tommelein, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1172-1179.

Quality in Constructed Project: Surveying Engineering, Gunther Greulich, Wayne H. Valentine and R. R. Chamard, SU May 94, p52-61.

West Breakwater Rehabilitation and Construction Supervision, Fernando A. S. Oliveira and H. de Jong, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994). p327-407.

Construction costs

Building Construction Detailed Estimating Practices in Saudi Arabia, Kamal M. Al-Harbi, David W. Johnston and Habib Fayadh, CO Dec. 94, p774-784.

The Channel Tunnel: Larger Than Life, and Late, Virginia Fairweather, CE May 94, p42-46.

A Conceptual Study of A Solar Power Satellite Using Centrifugal Force, Hiroshi Yamakawa, Hiroshi Kanamori, Kenji Nozaki, Takeo Oura, Takanori Sato, Hisahito Tadokoro, Kenji Takagi, Hiroshi Ueno, Koji Oishi, Haruyuki Namba and Shinji Matsumoto, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p57-63.

Demand/Supply Relationship in Transportation Network Design Problems: A Genetic Algorithm Approach, Yihua Xiong and Jerry B. Schneider, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p938-

Dispersive-Flow Energy Dissipator, Shou Long Yang, HY Dec. 94, p1401-1408.

Financing Construction and Operation Costs for Parks and Recreation Facilities, Richard Milbrodt, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p360-369.

A Framework for a Database of Construction Costs and Productivity at the Process Level for Transportation Infrastructure Development, Antonio A. González-Quevedo, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1854-1858.

Improvements Needed in Geosynthetics Design and Construction, CE June 94, p6

Improving Contractors' Bids Using Preference Reversal Phenomenon, Richard de Neufville and Jayme Todd Smith, CO Dec. 94, p706-719.

Labor-Political Factors for International Firms in Developing Regions, Enno "Ed" Koehn and Frank Atuahene, EI Jan. 94, p41-49.

Learning Curve Predictors for Construction Field Operations, John G. Everett and Sherif Farghal, CO Sept. 94, p603-616.

Practical Approach to Cope with Construction Cost Uncertainty in an Inflationary Environment, Diego Echeverry and Jorge Garcia, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2149-2156.

Predicting Changes in Construction Cost Indexes Usin Neural Networks, Trefor P. Williams, CO June 94,

p306-320.

Construction equipment
An Artificial Neural Network Approach to Allocating Construction Resources, Abdullah M. Alsugair and David Y. Chang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p950-957.

Design Criteria for Lunar Construction Equipment, John V. Gies, (Engineering, Construction, and Operations in

Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1237-1255.

For Hospital, Nowhere to Go but Up, CE Apr. 94, p16,19. Kinematics of Excavators (Backhoes) for Transferring Surface Material, A. J. Koivo, AS Jan. 94, p17-32.

Mounted Tower Crane Rises Above Tight Jobsite, CE Oct. 94, p10.

SELECTCRANE: An Expert System for Optimum Crane Selection, Awad S. Hanna, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p958-963.

A Tunnel Boring System for the Yucca Mountain Project, Steven N. Short, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p381-385.

Construction industry

2D Bar-Code Applications in Construction, Bob G. McCullouch and Kamolwan Lueprasert, CO Dec. 94, p739-752

ADR, TQM, Partnering, and Other Management Fantasies, F. H. "Bud" Griffis, El Oct. 92, p331-344.

Americans with Disabilities Act and Employment Practices in Construction, Stuart D. Anderson, Carolyn F. Morgan and Mukul Goel, El Oct. 94, p360-378.

Argentina: Back in Business, Kaitlin Quistgard, WP Spring 94, p19-22.

Average-Bid Method—Competitive Bidding Strategy, Photios G. Ioannou and Sou-Sen Leu, CO Mar. 93, p131-147.

Bringing the Construction Foreman Into the Computer Age, Richard J. Coble, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1446-1453.

Computer Automation and Project Organizational Impact: A Conceptual Model, Stuart Anderson and Suresh Ke-tha, (Computing in Civil Engineering, Khalil tha, (Computing in Civil Khozeimeh, ed., 1994), p498-501.

Computer Implementation of Fuzzy Reasoning in Tendering, C. M. Tam, K. C. Lam and Albert T. P. So, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1357-1364.

Computer Use in Claims Analysis -- Roundtable Discussion, John R. Knoke, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2136-2139.

Construction Competition and Competitive Strategies, Janet K. Yates, ME Jan./Feb. 94, p58-69.

Construction Manager Not Obligated to Pay Trade Contractor, CE Nov. 94, p36.

Contractors Ride on Information Highway, CE July 94, p8. Corps' CPAR Program Enters Sixth Year, CE Mar. 94, p8.

Critical Issues in Post Disaster Code Enforcement, Wilson C. Barnes and Jose D. Mitrani, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p284-293.

A Decision Support System for the Expansion of Interna-tional Operations of A/E/C Firms, Makarand Hastak, D. W. Halpin and Jorge A. Vanegas, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p735-742.

Demands and Satisfiers for Automation and Robotics in Construction: Differences Between Japan and the United States, Hiroshi Saito and John G. Everett, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p419-426.

Difficulties with Implementation of Goal Setting for Con-struction, Ahmad Hadavi and Raymond J. Krizek, ME Sept./Oct. 94, p48-54.

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p11-12 GSA Takes the Lead in Metric Construction, NE Jan. 94, p15.

How do Integration and Data Models Add Value to a Project? Martin Fischer, Thomas Froese and Douglas Phan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p992-997.

Improving Effectiveness of Equal Business Opportunity Programs, Zuhair El-Itr and Roozbeh Kangari, El July 94, p295-312.

In Five Years, CERF Has Significantly Impacted Construc-

tion Industry R&D, NE Nov. 94, p16.
Increasing Role of Privatization in Engineering and Construction, Janet K. Yates and Subhransu Mukherjee, ME Mar./Apr. 94, p57-65.

Mail Agn. 34, p. 1760.

Integrating Pen Computers with Other Keyless Data Systems for Construction Applications, Richard J. Coble and Charles J. Kibert, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1639-1646.

Introducing New Process Technologies into Construction Companies, Maria Laborde and Victor Sanvido, CO

Sept. 94, p488-508.

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Issues and Experiences in Developing Shared Object Models, D. H. Douglas Phan and H. Craig Howard, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p584-591.

Letter From Moscow, WP Special issue 94, p39.

Managing Uncertainty in Environmental Remediation Project Planning, Guru N. Rao and Francois Grobler, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p208-215.

Minority Contractors: Framework for New Policy Development, Zuhair El-Itr and Roozbeh Kangari, CO Sept. 94, p632-648.

Multimedia Technologies for Civil and Construction Engineering Professional Practice, Jorge A. Vanegas and Gary Smith, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p592-599.

A New Automated System for Decision Support in the Construction Industry, M. J. Riley and C. J. Pickering, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p523-530. No Crash in Sight for U.S. Economy, According to Fore-

casts, CE Nov. 94, p12-13.

Nova Award Winners Not the Same Old Thing, CE July 94, p19,21.

OODBMS in AEC Software Development: The Highs and Lows of Developing a Commercial Application, Gary D. Hamilton, Lisa Bell, Wade Cohn, Francois Grobler and Kyungrai Kim, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1430-1437.

Partnering for Success, Thomas R. Warne, 1994, 0-87262-976-7, 90pp.

A PC-Based Stochastic Project Scheduling and Costing Module, Kamalain K. Sha'ath and Gurdev Singh, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p9-16.

Pen Computing Can Streamline Site Inspections, ME Nov./Dec. 94, p12.

Personal Computer Model to Evaluate Performance of Construction Systems/Services, Dean T. Kashiwagi, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p502-506.

Precast Speeds Housing Construction, CE Mar. 94, p92. Professional Involvement in Development of Expert Sys-tems for Construction Industry, P. S. Brandon and I. D. Watson, CP Oct. 94, p507-518.

Rebuilding the Former Soviet States: Perspectives on the Construction Market, V. L. Khazanet, WP Spring 94, p32-36.

Role of Advanced Computer Technology in Construction Industry, Roger M. Henry, CP July 94, p385-389. Searching for Entrepreneurs, CE Apr. 94, p8.

Software Eases Contract Drafting, CC Feb. 94, p7-8.

Source Evaluation of Solid Waste in Building Construc-tion, Rafael M. Gavilan and Leonhard E. Bernold, CO Sept. 94, p536-552 Start-ups, CE Sept. 94, p8.

Study Puts Fragmented Pieces Back Together, ME Jan./ Feb. 94, p13.

Sustainable Competitive Advantage for Project-Management Consultants, Martin Betts, ME Jan./Feb. 94, p43-51.

Technological Advance in Japanese Building Design and Construction, Anthony C. Webster, 1994, 0-87262-932-5, 107pp.

Using CADD Application to Support Construction Activities, Annette L. Stumpf, Liang Y. Liu, Sangyoon Chin and Kenneth Ahn, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p531-538.

A Value Chain Model to Support Business Process Reen-gineering in Turnkey Contracting Firm, K. C. Choi, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1575-1582.

Value Engineering Software, ET Apr./May 94, p11.

Value of Concurrent Engineering for A/E/C Industry, Jesus M. de la Garza, Primo Alcantara, Jr., Munish Kapoor and P. S. Ramesh, ME May/June 94, p46-55.

World of Concrete Celebrates 20th Anniversary, CE Mar. 94, p22,24.

Construction inspection

Pen Computing Can Streamline Site Inspections, ME Nov./Dec. 94, p12.

Construction management

Action-Response Model and Loss of Productivity in Construction, David W. Halligan, Laura A. Demsetz, James D. Brown and Clark B. Pace, CO Mar. 94, p47-64

Analysis and Evaluation of Alternative Technologies, Simaan M. AbouRizk, Srinivasa R. Mandalapu and Miroslaw Skibniewski, ME May/June 94, p65-71.

Applications of Artificial Intelligence Techniques to Com-ponent-Based Modular Building Design, C. Bridgewater and B. L. Atkin, CP Oct. 94, p469-488.

Applying Portable Computing and Hypermedia to Con-struction, Trefor P. Williams, ME May/June 94, p41-45. Automated Construction-Simulation Optimization, Simaan

AbouRizk and Jingsheng Shi, CO June 94, p374-385. Automated Corrective Action Selection Assistant, Alan D. Russell and Aminah Fayek, CO Mar. 94, p11-33.

Beyond CPM: The Deck-of-Cards Paradigm, Francois Grobler, K. Praveen Reddy and Carol Subick, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2046-2053.

Choosing Appropriate Construction Contracting Method, Christopher M. Gordon, CO Mar. 94, p196-210.

Computer-Assisted Instruction in Civil Engineering, Thomas Froese, Sundar Prasad, Jeff Friesen and Dan Zollman, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1647-1654.

Computer-Integrated Construction and CM Firms: A Profitable Combination, Ed Ott, Matt Syal and Gary Gehrig, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1751-1755.

Constructing Around Contamination, Edward A. Wood, Jill R. Crosbie and Richard A. Brown, CE Oct. 94, p50-53

Construction Claims and Disputes: Causes and Cost/Time Overruns, Cheryl Semple, Francis T. Hartman and George Jergeas, CO Dec. 94, p785-795.

Construction Facilities Audit: Quality System-Performance Control, Allan F. Samuels, ME July/Aug. 94, p60-65. Construction Site Applications of CAD, John J. Mahoney and C. B. Tatum, CO Sept. 94, p617-631.

Contractors' Construction-Claims Avoidance, George F. Jergeas and Francis T. Hartman, CO Sept. 94, p553-560. Database Integration in Support of Construction Management, A. B. Cleveland, Jr. and J. F. Skolnick, (Comput-

ing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2054-2057. A Decision Support System for the Expansion of International Operations of A/E/C Firms, Makarand Hastak, D.

W. Halpin and Jorge A. Vanegas, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p735-742. Developments to the IRMA Model of AEC Projects. Thomas Froese, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p778-785.

Difficulties with Implementation of Goal Setting for Construction, Ahmad Hadavi and Raymond J. Krizek, ME Sept./Oct. 94, p48-54.

Early-Completion Schedules: The Promise and Pitfalls, Roy Mendelsohn, ME Jan./Feb. 94, p28-30.

Facilitate Delay Claim Analysis with As-Built Schedule Databases, John R. Knoke and Gary H. Jentzen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2104-2111.

Fitting Beta Distributions Based on Sample Data, Simaan M. AbouRizk, Daniel W. Halpin and James R. Wilson,

CO June 94, p288-305.

Fuzzy Modus Ponens Deduction Technique for Construction Scheduling, Ricky Wai-Kin Wu and Fabian C. Hadipriono, CO Mar. 94, p162-179.

Group Dynamics and Construction Project Manager, Pantaleo D. Rwelamila, CO Mar. 94, p3-10.

Improving Contractors' Bids Using Preference Reversal Phenomenon, Richard de Neufville and Jayme Todd Smith, CO Dec. 94, p706-719.

Learning Curve Predictors for Construction Field Opera-tions, John G. Everett and Sherif Farghal, CO Sept. 94, p603-616.

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Process Model for Public Sector Design-Build Planning, Anthony D. Songer, C. William Ibbs and Thomas R. Napier, CÓ Dec. 94, p857-874.

Process of Planning During Construction, Dora Cohenca-Zall, Alexander Laufer, Aviad Shapira and Gregory A. Howell, CO Sept. 94, p561-578.

RATAS Project—Developing an Infrastructure for Com-puter-Integrated Construction, Bo-Christer Björk, CP Oct. 94, p401-419.

Redesigning Job Site Planning Systems, Glenn Ballard, Gregory Howell and Saied Kartam, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1564-1574

Rehabbing Bridges Under Traffic, Rita Robison, CE Apr. 94, p44-47.

Robot for Interior-Finishing Works in Building: Feasibility Analysis, Abraham Warszawski and Yechiel Rosenfeld, CO Mar. 94, p132-151.

Startplan: Producing Schedule Templates Using IRMA, Thomas Froese and Qiang Kevin Yu, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p63-

Three-dimensional Modeling for Improving Construction Process Performance, Amarjit Singh, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1156-1163.

Using CADD Application to Support Construction Activities, Annette L. Stumpf, Liang Y. Liu, Sangyoon Chin and Kenneth Ahn, *Computing in Civil Engineering*, Khalil Khozeimeh, ed., 1994), p531-538.

West Breakwater Rehabilitation and Construction Supervision, Fernando A. S. Oliveira and H. de Jong, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p327-407.

Construction materials

Analysis of Inflating Habitable Space Structures with neomass (near-Earth-object mass), Anthony Zuppero, Nancy Linarez-Royce and Pat Whitman, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p247-256.

Architecture and Lightweight Structures: A Methodical Design Approach, Vinzenz Sedlak, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1010-1023.

Breakwater Design and Construction Harbor Centre Marina Sheboygan, Wisconsin, Tom Holtan, Dave Anglin, Dave Sanders and Larry Ryan, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p292-299.

Construction Materials, Once Tagged, Could Tell All, ET Oct./Nov. 94, p9.

Construction of Large Lunar Structures by Fusion Welding of Sintered Regolith, R. S. Crockett, B. D. Fabes, T. Nakamura and C. L. Senior, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1116-1127.

Construction Use of Polyester Composite Using Recycled PET, Karim S. Rebeiz, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994),

Damage to Engineered Structures at Homestead AFB, Maurice R. Harlan, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p213-222.

Design and Construction of Fiberglass Composite Building, Ed (Ahmed) Morsi and J. Larralde, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham,

ed., 1994), p751-757.

Design Criteria for Lunar Construction Equipment, John V. Gies, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1237-1255.

Dynamic-Behavior Modeler for Material Handling in Con-struction, Yvan J. Beliveau and Taylan Dal, CP July 94,

p269-285.

Effect of Material Properties on Compactability and Bear-ing Capacity, Chris J. Semmelink and Alex T. Visser, TE

July/Aug. 94, p570-589.

Failures and Failure Mechanisms for Exterior Walls, Gene S. Sanders, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and

Mehrdad Sotani, ed., 1994), p509-518.

Feasibility of Dual Technology in Manufacturing Lunar Concrete, Mohsen A. Issa and Husam A. Omar, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p933-941.

For the Realization of Lunar Concrete, Hiroshi Kanamori, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed.,

1994), p942-951.

High Performance Construction Materials and Systems: An Essential Program for America and Its Infrastructure -Technical Report, Report 93-5011, Civil Engineering Research Foundation, 1993, 0-87262-939-2, 205pp.

High-Performance Construction Materials and Systems: An Essential Program for America and Its Infrastructure Executive Report, Report 93-5011.E, Civil Engineering Research Foundation, 1993, 0-87262-938-4, 32pp.

Petroleum Contaminated Soils in Highway Construction, Jay N. Meegoda, A. Samer Ezeldin, David A. Vaccari and Robert T. Mueller, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p904-911.

Production of Lunar Concrete Using Molten Sulfur, Husam A. Omar and Mohsen Issa, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p952-959.

Recycled Engineering Applied to the First Lunar Outpost, Todd C. Parfet and Belinda S. Deeds, (Engineering, Construction, and Operations in Space IV, Rodney G Galloway, ed. and Stanley Lokaj, ed., 1994), p988-997. Sintering Bricks on the Moon, Carlton C. Allen, John C.

Graf and David S. McKay, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1220-1229.

A Space Station of Mars, Kimberly Butler, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p787-792.

Strategy for Beneficial Use of Stoker Boiler Coal Ash, Christina B. Behr-Andres, Gordon K. Parish and Neil J. Hutzler, EE Mar./Apr. 94, p401-415.

Summary of Highway Product Evaluation Practices and HITEC Needs Survey, CERF Report No. 94-5012, Civil Engineering Research Foundation, Highway Innovative Technology Evaluation Center, 1994, 0-87262-860-4, 40pp.

The Use of Type K Expansive Cement Concrete for New Construction and Rehabilitation of Concrete Bridge Decks, Kenneth A. Herr and Robert T. Barclay, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p955-962.

Utilization of Fossile Fuels Combustion Waste, Ivan Odler, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p57-73,

Construction methods

Akashi-Kaikyo Bridge Underconstruction, Fumio Nishino, Takeo Endo and Shin Kitagawa, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p779-780.

Asphalt Applications for Railroad Maintenance and Construction, Jerry G. Rose, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994),

Assembly of Simulation Networks Using Designs, Plans, and Methods, I. D. Tommelein, R. I. Carr and A. M. Odeh, CO Dec. 94, p796-815.

Automation and Robotics Opportunities: Construction Versus Manufacturing, John G. Everett and Alexander H. Slocum, CO June 94, p443-452.

Building A Barrier Wall Through Boulders, Donald R. McMahon, Michael J. Mann and Robert C. Tulett, CE Oct. 94, p60-62.

Building Performance Founded on an Improved Sand in Recife, Brazil, J. F. T. Jucá, A. O. C. Fonte and I. D. S. Pontes Filho, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1202-1213.

Building Procurement by Design and Build Approach, Issaka Ndekugri and Adrian Turner, CO June 94, p243-

Case Study of Burlington Cable-Stayed Bridge, Kevin E. Swiggum, Stuart D. Anderson and Jeffrey S. Russell, CO Sept. 94, p649-666.

Case Study of Navy Pier Pile Foundation Installation, Richard A. Nebel, II and Jeffrey S. Russell, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p311-320.

Construction of an Island, Brendan Bambrick, CO Mar. 94,

p223-227.

Construction Technologies for Sewer Rehabilitation, Santiago M. Reyna, Jorge A. Vanegas and Abdul H. Khan, CO Sept. 94, p467-487.

Cut and Cover Construction of the SSC Injector Tunnels, Mahendra P. Yajnik and Wayne Q. Hudler, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p749-754.

Damage to Engineered Structures at Homestead AFB, Maurice R. Harlan, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p213-222.

A Decision Support System for Evaluating the Suitability of a Robotics System for a Construction Project, Makarand Hastak, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p507-514.

Depressing Traffic Top-Down, Dan Burroughs, Shyi-Shyong Jiang and Henrie Henson, CE Jan. 94, p62-64.

Design & Construction of the Liberty Street Bridge Earth Support System, David R. Chapman, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p112-129.

Design and Construction of Shielded Lunar Outpost, S. D. Jolly, J. Happel and S. Sture, AS Oct. 94, p417-434.

Developing Plans for Robotic Excavators, Sanjiv Singh, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p88-96.

Development of a Mechanical Alcove Excavator for the Yucca Mountain Exploratory Study Facility, Erika Rönnkvist, James E. Friant and Levent Ozdemir, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p411-416.

Doubling A Pipeline, Gary Walker and John Myrick, CE Jan. 94, p50-53.

Effects of Design-Integrated Process Planning on Productivity in Rebar Placement, Md. Salim and Leonhard E. Bernold, CO Dec. 94, p720-738.

Engineering of the Building Envelope "To Do Or Not To Do", Norris Stubbs and Dale C. Perry, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p10-30.

For Design-Build, It's All in the Perception, CE June 94, p11-12.

Foundation Slab for Lunar Base Construction, Mikiya Okumura, Yasuhiro Ohashi, Takao Ueno, Shojiro Motoyui and Kiosuke Murakawa, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1128-1137.

GLG Grand, Atlanta Design and Construction, Martin R. Ocon, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p25-30.

Hollow Bridge Fills Void, CE Feb. 94, p26.

Daniel A. Cuoco, David B. Peraza Building Collapse, Daniel A. Cuoco, David B. Peraza and Thomas Z. Scarangello, CF Nov. 92, p211-231.

K-Factor for Columns in any Type of Construction: Nonparadoxical Approach, J. Dario Aristizabal-Ochoa, ST Apr. 94, p1272-1290.

Learning Curve Predictors for Construction Field Operations, John G. Everett and Sherif Farghal, CO Sept. 94,

p603-616.

Mat Foundation Design: An Historical Perspective, Edward J. Ulrich, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p107-120.

Methods to Reduce the Settlement of Embankments on Soft Clay: A Review, Jean-Pierre Magnan, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p77-91.

Microtunneling Techniques to Form an Insitu Barrier Around Existing Structures, Philip J. Coller and David G. Abbott, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p386-394.

Modified Roof Erection System, James D. Stevens and

Alan L. Murray, CO Dec. 94, p828-837.

Neuromodex-Neural Network System for Modular Construction Decision Making, Mirza B. Murtaza and Deborah J. Fisher, CP Apr. 94, p221-233.

New Design and Construction of Marinas in Israel, Rami Raviv, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p562-564

Novel, Low-Vibration Excavation Techniques for Underground Radioactive Waste Storage, Wilhelm J. Kogel-mann, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p417-429.

Offshore Rescue, Jonathan A. French, Paul Gustafson, John S. Murk and Kellene M. Burn-Lucht, CE Oct. 94, p42-

One Engineer's Wish List for Hurricane Hazard Mitigation, Ronald F. Zollo, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p268-277.

Overlaying Digital Images with 3-D CAD to Document as Built Construction, Karl A. Raynar and Gary R. Smith, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p751-758.

Possibilities and Problems of Latticed Structures, Mamoru Kawaguchi, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p350-376.

Project Case Study: Space Frame Roof Structure, Main Stadium, Shah Alam Sport Complex, Selangor, Malaysia, James A. Moses, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p377-382.

Redefining the Roles Insurers and Engineers Play in Hurricane Preparedness and Mitigation, Eugene L. Lecomte, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad So-

tani, ed., 1994), p1-9.

Roller-Compacted Concrete, U.S. Army Corps of Engineers, 1994, 0-87262-999-6, 100pp.

Settlement of a 15-Meter Deep Fill Below a Building, Percy M. Wimberly, III, Samuel G. Mazzella and F. Barry Newman, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p398-416.

Settlement of Peats and Organic Soils, Tuncer B. Edil and Evert J. den Haan, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1543-1572.

Simplified Simulation Model Development for Construction Projects, Amr A. Oloufa, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p362-367.

St. Louis Complex's Hefty Crown, CE Nov. 94, p14. Time-Space Tradeoff Strategies for Space-Schedule Construction, Pierrette P. Zouein and Iris D. Tommelein, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1180-1187.

To Microtunnel or Not to Microtunnel? The Construction of the Crown Point Trunk Sewer, Karen Larson Henry and Dave Zoumaras, (Hydraulics of Pipelines, Deon T Fowles, ed. and Douglas H. Wegener, ed., 1994), p73-

Transferring Construction Technology to the Moon and Back, John F. Connolly and Debra D. Shoots, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994),

Trenchless Relief, Tad Pilecki, Stephen J. Klein and Art

Hamid, CE Jan. 94, p58-60.

Upgrading Dubai's Sewers, Henry R. Derr and Bruce W. Jones, CE Aug. 94, p60-63.

Construction planning

Are Geosynthetics Incorrectly Specified? (ltr), CE Aug. 94, p27,30. Assembly of Simulation Networks Using Designs, Plans,

and Methods, I. D. Tommelein, R. I. Carr and A. M.

Odeh, CO Dec. 94, p796-815. Comparative Analysis of Three Constructability Approaches, Jeffrey S. Russell, John G. Gugel and Michael W.

Radtke, CO Mar. 94, p180-195. Computer-Integrated Construction, Bruce C. Coles and

Kenneth F. Reinschmidt, CE June 94, p50-53.

Developing an Object Based Planning System for Precast Concrete Building Structures, John I. Messner, Victor E. Sanvido and Masaaki Ikeda, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1426-1429

A Frame-Based Drawing Management System Based on Building Object Model, Gakuhito Hirasawa and Yusuke Yamazaki, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p555-562.

Gateway to Columbus, John Hillman and Daniel K. Burroughs, CE Dec. 94, p58-61.

HVLS: Horizontal and Vertical Logic Scheduling for

Multistory Projects, Walid Y. Thabet and Yvan J. Beliveau, CO Dec. 94, p875-892.
An Integrated Approach To Repetitive Construction Planning, Boliver A. Senior and Daniel W. Halpin, (Comput-

ing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p25-32.

Intelligent Construction Planning, A. Warszawski and O. Shaked, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p972-979.

Japan Builds 21st Century Monuments, Charles R.

Heidengren, CE Aug. 94, p57-59.

MDA Planner: Interactive Planning Tool Using Product Models and Construction Methods, Adina Jägbeck, CP

Oct. 94, p536-554.
Modeling Work Space to Schedule Repetitive Floors in Multistory Buildings, Walid Y. Thabet and Yvan J. Beliveau, CO Mar. 94, p96-116.

MoveCapPlan: In Integrated System for Planning and Controlling Construction Material Laydown and Handling, I D. Tommelein, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1172-1179.

Nighttime Cement Concrete Pavement Replacement Seattle-Tacoma International Airport, Jo A. Lary and John Rothnie, (Aviation Crossroads: Challenges in a Chang-

ing World, William J. Sproule, ed., 1994), p92-101.

Object-Oriented Process Modeling to Support Cooperative Planning in Industrialized Building Construction Project, Yusuke Yamazaki, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p998-1005. Planes, Trains and the Games, John Prendergast, CE Aug.

94, p38-41. Pregame Show, Paul Tarricone, CE Aug. 94, p34-37. Process of Planning During Construction, Dora Cohenca-Zall, Alexander Laufer, Aviad Shapira and Gregory A.

Howell, CO Sept. 94, p561-578

A Process-Oriented Planning and Control Model for Com-A Process-Oriented Planning and Control Model for Computer-Integrated Construction, Tarek M. Attia and Leonhard E. Bernold, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1756-1763.

Redesigning Job Site Planning Systems, Glenn Ballard, Gregory Howell and Saied Kartam, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1564-

1574.

The Squuntum Point Personnel Ferry and Metropolitan District Park, Quincy, Massachusetts, Patricia S. Loheed, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p370-376.

Using CADD Application to Support Construction Activi-ties, Annette L. Stumpf, Liang Y. Liu, Sangyoon Chin and Kenneth Ahn, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p531-538.

Construction practices
U.S., Japan Bridge Gaps in Culture and Construction Practice, ME Mar./Apr. 94, p1.

Construction procedure Construction Manager Not Obligated to Pay Trade Contractor, CE Nov. 94, p36.

Solutions From an Unlikely Source, CE Jan. 94, p8.

Construction site accidents

Sub Must Indemnify Construction Manager, CE Oct. 94, p27.

Construction sites

Applying Portable Computing and Hypermedia to Construction, Trefor P. Williams, ME MayJune 94, p41-45.
ASCE Quality Summit Raises Troubling Questions on Safety and Other Issues Confronting Engineers, NE Jan. 94, pl.

Automated Corrective Action Selection Assistant, Alan D. Russell and Aminah Fayek, CO Mar. 94, p11-33.

Case Study - Performance of Diaphragm Walls During Construction; Predictions vs. Field Measurements, Abdol R. Haghayeghi and Mehrdad Mirzakashani, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p264-270.

Constructing Around Contamination, Edward A. Wood, Jill R. Crosbie and Richard A. Brown, CE Oct. 94, p50-

Construction Site Applications of CAD, John J. Mahoney and C. B. Tatum, CO Sept. 94, p617-631. MDA Planner: Interactive Planning Tool Using Product Models and Construction Methods, Adina Jägbeck, CP Oct. 94, p536-554. Mounted Tower Crane Rises Above Tight Jobsite, CE Oct.

94, p10.

53

Quality Summit Focuses on Safety, CE Jan. 94, p11. Safety at the Site, Virginia Fairweather, CE Aug. 94, p50-

Time-Space Tradeoff Strategies for Space-Schedule Construction, Pierrette P. Zouein and Iris D. Tommelein, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1180-1187.

Consultants

Engineering Management and Project Triangle, John C. Bishop and E. Casey Madden, ME July/Aug. 94, p24-Improvements Needed in Geosynthetics Design and Con-

struction, CE June 94, p6. International Information and Technology Transfer. Charles G. Gunnerson, El Oct. 91, p336-350.

Poor Service Not Poor Design Drives, ME Nov./Dec. 94, p12.

Consulting engineers

Business Engineer: Role for Consulting Civil Engineer in Year 2000, Mel Sears, ME Mar./Apr. 94, p35-38 Consulting-Firm Values Slip during 1993, NE Apr. 94, p5.

Dispute Avoidance and Resolution for Consulting Engineers, Richard K. Allen, 1993, 0-87262-903-1, 85pp. Engineers and Contractors Go Global, Brian J. Lewis, WP Special issue 94, p20-24

Improvements Needed in Geosynthetics Design and Con-

struction, CE June 94, p6.

Leading Creative People as Consulting Engineering Becomes Globalized, Brian J. Lewis, ME Mar./Apr. 94, p39-43.

Mentoring for Consulting Engineers, John Dionisio, ME Sept./Oct. 94, p16-19.

A Primer for Financial Management of Small Consulting Firms, H. Edmund Bergeron, ME Mar./Apr. 94, p28-34. Qualification System for Building Engineers in Japan,

Katsumi Yano, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p211-214.

Report Analyzes Pay and Perks, CE Sept. 94, p8. Understanding ISO, Virginia Fairweather, CE Feb. 94, p59-61.

Consulting services

CEOs Discuss People and Profits, ME Jan./Feb. 94, p13. From Smoking Policies To Notebook Computers, ME Sept./Oct. 94, p15.

Identifying Causes of Failure in Providing Geotechnical and Environmental Consulting Services, Douglas C. Moorhouse and Richard A. Millet, ME May/June 94, p56-64.

Report Analyzes Pay and Perks, CE Sept. 94, p8.

Staffing and Projects Grow Slightly in 1993, CE June 94,

Contact pressure

A Computational Algorithm for Analysis of Rectangular Footings Under Partial Contact with Soil, P. Rajendran, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p652-659.
Construction Robot Force Control in Cleaning Operations, Y. Zhou and M. J. Skibniewski, AS Jan. 94, p33-49.

Hydraulics of Stationary Capsule in Pipe, Henry Liu and James L. Richards, HY Jan. 94, p22-40.

Mechanical Behavior of Metal Contact Joint, Shigeru Kuranishi, Futamia Naganuma, Masatoshi Nakazawa and Tetsuo Iwakuma, ST July 94, p1977-1990.

Container shipping

Port of Tacoma Milwaukee Waterway Nearshore Fill Design, John R. Verduin, Doug Saathoff and Garry E. Horvitz, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1388-1399.

Containers

Analyses of Releases Due to Drilling at the Potential Yucca Mountain Repository, R. W. Barnard, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1292-1297.

The Application of Thermal Rock Bolts in the Thermal Design of a Nuclear Waste Repository, George Danko, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

Canisters and Nonfuel Components at Commercial Nuclear Reactors, Kathy Gibbard and James Disbrow, (High Level Radioactive Waste Management, High Level Ra-dioactive Waste Program Committee, 1994), p1543-1552.

Certification of a Spent Fuel Cask for Storage and Trans portation, Meg Lusardi, Robert M. Bernero and Charles H. Haughney, (High Level Radioactive Waste Manage-ment, High Level Radioactive Waste Program Commit-

tee, 1994), p1168-1173.

Coupled Comparison of Thermal-Mechanical-Hydrological Analysis of a Fractured Rock Mass, M. P.
Ahola, A. H. Chowdhury, S. M. Hsiung and J. Philip,
(High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2492-2499.

A Comparison of Spent-Fuel Shipping Cask Response to 10 CFR 71 Normal Conditions and Realistic Hot Day Extremes, Steven James Manson and Steven Eric Gianoulakis, (High Level Radioactive Waste Management. High Level Radioactive Waste Program Committee, 1994), p788-795.

Concept for Hazardous Material Management and Con-tainer Closure Using Copper Based Alloys, Holt Murray, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1000-1007.

- Confirmation of MRS/MPC Transfer Facility Sizing Using Simulation Modeling, E. Scott Houston and Jennifer D. Hadley, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1387-1392.
- Corrosion of HLW Carbon Steel Containers in the Vapor Phase of Salt Brines, E. Smailos, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p963-968.
- Corrosion Scenario Development for Corrosion Lifetime Prediction of Carbon Steel Used for Geological Disposal Package, Takanori Fukuda, Guen Nakayama and Masatsune Akashi, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p977-983.
- Coupled Mass-Transport and Chemical-Equilibrium Modelling of Bronze Disease, M. B. McNeil and J. C. Walton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), n1014-1019
- The Development of a Packaging Handbook, L. B. Shappert, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1237-1241.
- Dry Storage and Transportation of Failed Fuel, Robert D. Quinn and Brandon D. Thomas, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p949-954.
- Dynamic Simulation of Tractor-Trailer-Cask System Used in Nuclear Waste Transportation, Zekai Ceylan and Cahit Evrensel, *High Level Radioactive Waste Management*, High Level Radioactive Waste Program Committee, 1994), p934-941.
- The Effect of Fuel Type in Unsaturated Spent Fuel Tests, P. A. Finn, M. Gong, J. K. Bates, J. W. Emery and J. C. Hoh, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), n1080-1087.
- Effects of Axial Burnup Distributions on the Reactivity of Spent Fuel, Theodore A. Parish, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p744-751.
- Effects of Policy and Other Changes on Transuranic Waste Disposal at WIPP, Robert H. Neill and Lokesh Chaturvedi, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p280-284.
- Evaluation of Dynamic Compaction of Low Level Waste Burial Trenches Containing B-25 Boxes, Scott R. McMullin, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p44-54.
- Experimental Heat Transfer and Fluid Flow Over Drift-Emplaced Canisters, William G. Culbreth and Satish Pattisam, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p772-779.
- Fabrication and Testing of High Strength, High Capacity, Weight Optimized Trailers, Chad Taylor, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p931-933.
- Fabrication Options for Depleted Uranium Components in Shielded Containers, Susan B. Derrington, James E. Tompson and Cameron W. Coates, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p942-948.
- Feasibility of Using MPCs for DOE Research and Production Fuel, Daryl A. Lopez and David G. Abbott, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p457-466.
- The First Multipurpose Spent Fuel Container Reviewed by the U.S. Nuclear Regulatory Commission (USNRC), Ivan F. Stuart, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),
- Heat Transfer Effects in Vertically Emplaced High Level Nuclear Waste Container, Samir F. Moujaes and Yao M. Lei, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p816-822.

- High-Burnup/Low Cooling-Time Fuel Carrying Capacity of the GA-4 and GA-9 Spent Fuel Shipping Casks, J. K. Boshoven and J. E. Hopf, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p913-917.
- Hills, Charles R. Vojislav Banjac and A. Sharif Heger, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p671-678.
- Human Factors Engineering Applications in the Testing of the Legal Weight Truck Cask Transportation System, Thomas C. Smith, Millard Peck, III and Robert A. Sealock, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p375-380.
- Implementation of Response Function Concept for Spent Fuel Cask Analyses, C.-K. Chris Wang, Jack W. Foster and Dominique Napolitano, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p752-756.
- Integrated Modelling of Near Field and Engineered Barrier System Processes, Alan Lamont and James Gansemer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), pi195-1201.
- Investigation of Stress in a Circular Tunnel Due to Overburden and Thermal Loading of Horizontally Placed 21 PWR Multi Purpose Canisters, Nadia Kandalaft-Ladkany and Richard V. Wyman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p860-867.
- Long-Term Effects of Neutron Absorber and Fuel Matrix Corrosion on Criticality, William G. Culbreth and Paige R. Zielinski, High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p634-641.
- Monitored Retrievable Storage (MRS) Facility Project Status, Ronald A. Milner, Victor W. Trebules and James B. Blandford, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1358-1364
- Monitored Retrievable Storage/Multi-Purpose Canister Analysis: Simulation and Economics of Automation, Phil C. Bennett and Joe B. Stringer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p363-369.
- MPC Closure Weld Model Study, Brain J. Kruse, Joe B. Stringer and Giles G. Childress, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p435-443.
- Multi-Barrier Borehole Canister Designs for a Tuff Repository, David E. James, Robert L. Skaggs and Sunceta Mohansingh, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p650-657.
- Multi-Barrier Waste Package Fabrication and Closure Development, Wayne E. Wallin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p955-962.
- Multi-Purpose Canister At-Reactor and Monitored Retrieval Storage, Tonya H. Sawyer and Robert G. Eble, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1380-1336.
- Multi-purpose Canister Conceptual Design Approach, Nick L. Seagle, Giles G. Childress, III, James R. Thomton, David N. Summers and Alan H. Wells, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1143-1151.
- Multi-Purpose Canister Criticality Control Design Features, James R. Thornton, Kelvin J. Montague, Alan H. Wells and Daniel A. Thomas, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p823-830.
- Near-Field Thermal Calculations for Individual Waste Package Placement, Suresh Lingineni, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p611-618.

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- A Numerical Study of Convection Heat Transfer Within Enclosed Horizontal Rod-Bundles, M. Keyhani and Luo, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p780-787.
- Performance Assessment of the Copper/Steel Canister, Patrik Sellin, Torsten Eng and Lars Werme, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1020-1029.
- Performance Assessment of the INEL Spent Fuel and HLW in Two Hypothetical Repositories, Larry L. Taylor, Robert P. Rechard, Henry H. Loo, Ronald D. Klinger and Leonard F. Ermold, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1508-1513.
- A Probabilistic Approach to Assessing Radioactive Waste Container Lifetimes, Fiona M. Porter, Chris C. Naish and Susan M. Sharland, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1008-1013.
- Qualification Leak Testing of the GA-4 and GA-9 Closure Seal Design, Richard H. Boonstra, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p923-930.
- Regulatory Issues Associated with the Multi-Purpose Canister (MPC) System, John P. Roberts, Robert G. Morgan, Mary L. Birch and Linda J. Desell, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1161-1167.
- Review of Advanced Techniques for Waste Canister Labeling, William G. Culbreth, Bharani Kumar Bhagi and Anand Kanjerla, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1791-1795.
- Role of the Dual Purpose (Storage and Transport) Metal Cask In the Spanish Strategy for Temporary Storage of Spent Fuel, José Gago and José M. Grávalos, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1174-1178.
- Selecting the Design Basis Fuel for the Multi-Purpose Canister, Douglas A. Williamson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p430-434.
- Shielding Analysis for the Conceptual Design of the MPC Transportation Cask, Kelvin J. Montague, James R. Thomton, Jr. and Robert G. Eble, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p918-922.
- Simulation of Heat Transfer Around a Canister Placed Horizontally in a Drift, Samir Moujaes and Akshay Bhargava, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p801-808
- Stakeholder Involvement in the Evaluation of a Multipurpose Canister System, Jeffrey R. Williams, Dan Kane and Thomas B. Smith, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p182-187.
- Stakeholder Involvement in the Evaluation of a Multipurpose Canister System, Susan Smith, Pete Bolton and Tim Dantoin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), 9314-1-314-6.
- Structural Performance of a Multipurpose Canister Shell for HLNW Under Normal Handling Conditions, Samaan G. Ladkany and Rajkumar Rajagopalan, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), 9984-992.
- System Impacts of Fuel (Age and Burnup) Selection, Flora Emami, William Bailey and Mark Fleming, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1538-1542.
- System Implementation of the Multipurpose Canister, William R. Hollaway and Robert Rozier, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1137-1142

- A Systems Approach to the Management of a Contaminated Metal Recycle Project, Layne Pincock and Steven Wahnachaffe, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1069-1073.
- Thermal Finite Element Analyses of 26 Waste Package Spent Nuclear Fuel Loading Configurations, A. O. Thompson and M. J. Plinski, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p796-800.
- Thermal Performance of a Depleted Uranium Shielded Storage, Transportation, and Disposal Package, S. D. Wix and H. R. Yoshimura, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p877-881.
- Thermal Response of the Waste Package/MPC and EBS, Robert H. Bahney, III and Thomas W. Doering, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p809-815.
- Transfer of Spent Nuclear Fuel Into Multi-Purpose Canister Storage, Roger G. Wagstaff, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p444-451.
- An Updated Fracture-Flow Model for Total-System Performance Assessment of Yucca Mountain, John H. Gauthier, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1663-1670.
- Verification Testing of Multi-Purpose Rail Cask Impact Limiters, Charles J. Temus, Ian D. McInnes, Ken Miller and Robert A. Johnson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p452-456.
- Waste Package Materials Selection Process, Ajit K. Roy, Robert L. Fish and R. D. McCright, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p993-999.
- Yucca Mountain: A Potential Trade-Off in Radiological Hazards, P. Spiegler, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1959-1963.

Containmen

- Alternative Approaches to Reliability Modeling of a Multiple Engineered Barrier System, Malwane M. A. Ananda and Ashok K. Singh, (*High Level Radioactive Waste Management*, High Level Radioactive Waste Program Committee, 1994), p1030-1036.
- Automation Concepts for In-Situ Waste Containment, Larry Banta and David Martinelli, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p448-456.
- Capping Contaminated Sediments The Theoretical Basis and Laboratory Experimental Evidence for Chemical Containment, L. J. Thiobodeaux, K. T. Valsaraj and D. D. Reible, (Dredging '94, E. Clark McNair, Jr., ed., 1994), s
- Concept for Hazardous Material Management and Container Closure Using Copper Based Alloys, Holt Murray, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1000-1007.
- Concrete Watertight Structures and Hazardous Liquid Containment, Robert Hengst, 1994, 0-87262-791-8,
- Design of Dredge Containment and Dewatering Facilities, John M. Logigian, Edward A. Dudek, Jr. and Michael R. Palermo, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1230-1239.
- Development and Feasibility of a Waste Package Coupled Reactive Transport Model (AREST-CT), David W. Engel, B. Pete McGrail, James A. Fort and Janet S. Roberts, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1214-1221.
- Development of an Excavation Plan for Heavy Metal Contaminated Marsh Deposits, John J. Nocera and Thomas M. Simmons, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1220-1229.

The Dioxin Capping Project at the NY Mud Dump Site, Scott McDowell, Brian May and Douglas Pabst, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1270-1277.

Disposal Site Capping Management: New Haven Harbor, Thomas J. Fredette, (*Dredging '94*, E. Clark McNair, Jr.,

ed., 1994), p1142-1151.

Environmental Uses of Cement in Waste Conditioning, F. P. Glasser, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994),

FY93 Thermal Loading Systems Study, Steven F. Saterlie and Brent H. Thomson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p573-585.

Hills, Charles R. Vojislav Banjac and A. Sharif Heger, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p671-678.

Immobilization of Heavy Metals in Cementitious Matrix, J. Tritthart, F. D. Tamas, M. Patkai-Horvath and E. Zinterl, (Advances in Cement and Concrete, Michael W Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p614.

The Impact of the Doe Decision Making Process at the Waste Isolation Pilot Plant with Respect to Petroleum Reserves, Matthew Silva, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1753-1761.

IPA Phase 2 Total System code and Scenario Analysis, James R. Park, Robert G. Baca, Norman A. Eisenberg, Ronald W. Janetzke and Budhi Sagar, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1461-1468.

Marathon Battery Superfund Project - A Review of Design, Construction and Lessons Learned, Michael P. Taylor, Pamela N. Tames and Alan R. Elia, (*Dredging* '94, E. Clark McNair, Jr., ed., 1994), p1210-1219.

Modeling Cap Placement at New York Mud Dump Site, Robert E. Randall, James E. Clausner and Billy H. Johnson, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1295-1304.

Ocean Disposal with Capping of Dioxin Contaminated Sediment: New York Case History #1, Monte Greges, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1278-

Physical Design Aspects of Capping Projects, James E. Clausner, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1132-1141.

Prediction of Cladding Life in Waste Package Environ-ments, J. Kevin McCoy and Thomas W. Doering, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p565-572.

The Present State-of-the-Art of Immobilization of Hazardous Heavy Metals in Cement-Based Materials, David Bonen and Shondeep L. Sarkar, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), 9481-498.

Sediment Remediation: An International Review, Daniel E. Averett and Norman R. Francingues, Jr., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p596-605.

Shale Slurry Walls, ET June/July 94, p11.

Subbottom Profiling of a Sand Capped Disposal Mound, Peggy Murray, Mary Wiley, Douglas Pabst and Brian May, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1285-1294.

Waste Package Performance Allocation System Study Report, Richard D. Memory, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p969-976.

Containment vessels

Fiber-Glass Composite Aircraft Pad for Crop Dusting, Srinivasa L. Iyer, Vijayakumar Ranganathan and Terry Gross, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p743-750.

Safety Assessment of a Chemical Reactor Vessel, A. Wiedermann, A. Longinow and F. Calabrese, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1-6.

Contaminants

Achieving Adequate BMP's for Stormwater Quality Management, Anne Jones-Lee and G. Fred Lee, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p524-531

Agitation Dredging Environmental Study, Larry M. Stuber and Elizabeth A. Day, (Dredging '94, E. Clark McNair,

Jr., ed., 1994), p76-85

Capping Contaminated Sediments - The Theoretical Basis and Laboratory Experimental Evidence for Chemical Containment, L. J. Thibodeaux, K. T. Valsaraj and D. D. Reible, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1001-1007.

Peggy Murray, Drew Carey and Thomas J. Fredette, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1008-

Coffee, Tea or Clean Water?, CE May 94, p8.

Contaminant Fate and Transport Model in Pool-and-Riffle Streams, Il Won Seo, Dae Young Yu and Jae-Hyung Lee, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p165-169.

Contaminated Dredged Sediment Disposal Criteria, G. Fred Lee and Anne Jones-Lee, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p121-130.

Critical Concepts for Column Testing, Charles D. Shackelford, GT Oct. 94, p1804-1828.

Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994, 0-7844-0031-8, 825pp.

Delineating Limits of Remediation for Heavy Metal Contaminated Sediments in River and Cove Areas, Gregory

taminated Seculments in River and Cove Areas, Gregory P. Matthews and Thomas M. Simmons, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1240-1249. Demonstration of Equipment for Dredging Contaminated Sediments at Buffalo River, Buffalo, New York, B. Thomas Kenna, Daniel E. Averett, Paul A. Zappi and Stephen M. Yaksich, (Dredging '94, E. Clark McNair, 1991), 19935. Jr., ed., 1994), p885-895.

Demonstration of Pneuma Dredging Technology, Giovanni Faldi and Timothy L. Gahring. (Dredging '94, E. Clark Faldi and Timothy L. Gahring, (*Dredging* McNair, Jr., ed., 1994), p1047-1049.

Development of Transport Model for Groundwater Planning and Management in Taipei Basin, Nien-Sheng Hsu, Ming-Jame Horng, Chian Min Wu, William W-G. Yeh and Jan-Tai Kuo, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994). p332-335.

Dispersivity in Heterogeneous Permeable Media, Dwayne A. Chesnut, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Commit-

tee, 1994), p1822-1841. Disposal of Contaminated Sediments in NY/NJ Harbor, Joel A. Pecchioli, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p606-615.

Disposal Site Capping Management: New Haven Harbor, Thomas J. Fredette, (*Dredging '94*, E. Clark McNair, Jr.,

ed., 1994), p1142-1151.

DREDGMAP: A PC Based System to Predict the Fate of Dredged Material, J. Craig Swanson, Malcolm L Breuged Material, J. Clang Swanson, Marsoni Espaulding and Tatsusaburo Isaji, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p.200-209. Enhancing Nuclear Waste Disposal Safety by Exploiting Regional Groundwater Flow—An Exploratory Proposi-

tion, József Tóth and Grant Sheng, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1797-1804.

Estimation of Field Site Flow Parameters, Yahia Majali, Salwa Rashad, John Hoopes and Tswn-Syau Tsay, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p303-307.

Evaluating Methods for Statistical Analysis of Less than Detection Limit Data Using Simulated Small Samples 2. General Results, Joan U. Clarke, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p747-755.

An Evaluation of the Impact of Recent Flooding on the Operation of a Groundwater Extraction and Treatment System at a Superfund Site, Kerry L. Gavett, Michael J. Fiore and Eric J. Meyer, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p764-771. Evaluation of Thermo-Hydrological Performance in Support of the Thermal Loading Systems Study, Thomas A. Buscheck, John J. Nitao and Steven F. Saterlie, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p592-610.

Evolution of Cable Arm Clamshell Bucket, J-P. Pelletier, R. Santiago and J. Lajeunesse, (*Dredging '94*, E. Clark

McNair, Jr., ed., 1994), p1050-1060. An Eye for Toxics, ET June/July 94, p10.

A Framework for the Environmental Risk Assessment of Contaminated Sediments, Tom M. Dillon, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p141-149.

Geostatistics for Fracture Characterization, R. Mohan Srivastava and Bruce M. Davis, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p2131-2138.
Geotechnical Analysis of Capped Dredged Material Mounds, Armand J. Silva, Horst G. Brandes, Carl J. Uchytil, Thomas J. Fredette and Drew Carey, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p410-419. Groundwater Model Simulation of Chemical Transport

from a Nearshore Confined Sediment Disposal Facility, Michael Riley, Gopal Biswas, Charles Boatman, Robert Brockhaus, Mark Utting and Doug Hotchkiss, (*Dredging* '94, E. Clark McNair, Jr., ed., 1994), p1517-1526.

How Can a Radioactive Waste Disposal Facility Achieve Compliance with RCRA? Ruth F. Weiner, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1525-1531.

Improving Subsurface Characterization and Prediction of Contaminant Transport, Salwa Rashad and Craig H. Benson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p277-281.

In Situ Sediment Treatment of Dofasco Boatslip, Hamilton Harbour, Tom Murphy, Henry Brouwer and Jay Babin, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1071-

Innovative Treatment of Soil Contamination: Radiolytic Destruction of Dioxin and Co-Contaminants by Cobalt-60, Roger J. Hilarides and Kimberly A. Gray, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p733-736.

Iron and Sand Marge to Treat TCE-Contaminated Water,

ET June/July 94, p5.

Laboratory and Field Demonstrations of Sediment Treatment Technologies by the USEPA's Assessment and Remediation of Contaminated Sediments (ARCS) Program, Stephen Garbaciak, Ir., (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p567-578.

LADS System, Inc. Thermal Remediation Treatment for Contaminated Sediment, Vladimir Shepsis, Nancy L. Case and Gregory L. Hartman, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p66-75.

Leachate Testing and Evaluation for Freshwater Sediments, James M. Brannon and Tommy E. Myers, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p737-746.

Looking into Toxics, CE June 94, p19.

Modeling Volatile Organic Contaminants' Fate in Wastewater Treatment Plants, H. Melcer, J. P. Bell, D. J. Thompson, C. M. Yendt, J. Kemp and P. Steel, EE May/June 94, p588-609.

Monitoring of Water Injection Dredging, Dredging Pollut-ed Sediment, W. G. Borst, Joh. G. S. Pennekamp, H. Goossens, A. Mullié, P. Verpalen, T. Arts, P. F. van Dreumel and W. D. Rokosch, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p896-905.

Movement of Colloids Under Hydraulic Gradients, Rao S. Govindaraju and Lakshmi N. Reddi, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p322-326.

Near-Field Thermal Calculations for Individual Waste Package Placement, Suresh Lingineni, (High Level Radioactive Waste Management, High Level Radioactive

Waste Program Committee, 1994), p611-618.

A Nearshore Model for Cleveland CSO Remediation Design Selection, David P. Podber, Chieh-Cheng J. Yen, Lou Regenmorter, Keith W. Bedford and Onyx W. H. Wai, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p222-226. An Object-Oriented Approach to PC Finite-Element Solutions, Robert J. Lang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1236-1243.

Partial Infeasibility Method for Chance-Constrained Aqui fer Management, Nathan Chan, WR Jan./Feb. 94, p70-

140

Photocatalytic Transformations and Degradation of 2,4,6-trinitrotoluene (TNT) in TiO2 Slurries, Daniel C. Schmelling and Kimberly A. Gray, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p751-755.

Physical Design Aspects of Capping Projects, James E. Clausner, (*Dredging '94*, E. Clark McNair, Jr., ed.,

1994), p1132-1141.

A Physically Based Conceptual Model for Simulating Con-taminant Levels in Subsurface Water, Miguel A. Mejia, Mohamed M. Hantush and Miguel A. Mariño, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p355-

Pilot-Scale Demonstration of Sediment Washing, Jim E. Galloway and Frank L. Snitz, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p981-990.

Pilot-Scale Demonstrations of Thermal Desorption for the Treatment of Contaminated River Sediment, B. Thomas Kenna, David Conboy, Judith Leithner, Daniel Averett and Stephen Yaksich, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p474-483.

Placement Techniques for Capping Contaminated Sediments, Michael R. Palermo, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1111-1121.

Predicting the Impact from Significant Storm Events on a Hazardous Waste Site, Udai P. Singh, Neal P. Dixon and J. Stephen Mitchell, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p772-780.

A Predictive Hydrologic Model for Contaminant Leaching and Liner Effectiveness at Dredged Material Confined Disposal Facilities, Nadim M. Aziz, Paul R. Schroeder and Tommy E. Myers, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1507-1516.

Recent Assessment and Decontamination Studies of Contaminated Sediments in the New York/New Jersey Harbor, Eric Stern, Joseph Olha, Audrey A. Massa and Bryce Wisemiller, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p458-467.

Reconstruction of Concentration Boundary Condition for Unsteady Pesticide Transport Modeling, Deborah J. Mossman and Nael Al Mulki, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p160-164.

Recovery of Chromium from Spent Plating Solutions by a Chromyl Chloride Process, Subbarao L. Guddati, Thomas M. Holsen and J. Robert Selman, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p241-248.

Restoration and Capping of Contaminated Sediments, Carl E. Stivers and Robert Sullivan, (*Dredging '94*, E. Clark

McNair, Jr., ed., 1994), p1017-1026.

Sediment Remediation: An International Review, Daniel E. Averett and Norman R. Francingues, Jr., (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p596-605.

Seepage through Dike Walls of the Chicago Confined Disposal Facility, D. D. Reible, S. A. Savant-Malhiet, L. J. Thibodeaux, K. T. Valsaraj and T. E. Myers, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1490-1496.

Shale Slurry Walls, ET June/July 94, p11.

State Regulation of Upland Disposal of Dredged Material in Michigan, Frank Snitz, Douglas Zande and Pamela Horner, (Dredging '94, E. Clark McNair, Jr., ed., 1994),

Thermally Enhanced Bioremediation of a Gasoline-Contaminated Aquifer Using Toluene Oxidizing Bacteria, Rula Deeb and Lisa Alvarez-Cohen, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p400-407.

Turbidity and Contaminant Release During Dredging of Contaminated Sediments, Ronald W. van Oostrum and Peter Vroege, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p210-219.

141

A Two-Dimensional Contaminant Transport Model with High-Resolution Upwind Schemes, Dihua Zhao, Jihn-Sung Lai and Hsieh Wen Shen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p135-139.

Use of Expert Systems in Selecting Equilibrium Isotherms of Organic Compound Adsorption on Activated Carbon, Imad A. Basheer and Shrinath Kotdawala, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p640-643.

Vibratory Mobilization of Immiscible Liquid Ganglia in Sands, Lakshmi N. Reddi and Sreedhar Challa, EE Sept./Oct. 94, p1170-1190.

The Welland River Dredging Demonstration, Philip Miles and Donald Marr, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1061-1070.

Bio-Remediation of Simulated Fire Training Facility, Don-ald P. Butcher and Peter C. Gaskin, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p127-136.

Constructing Around Contamination, Edward A. Wood, Jill R. Crosbie and Richard A. Brown, CE Oct. 94, p50-

Cracking and Fracture Behavior of Soil, Hsai-Yang Fang, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed.,

1994), p102-117.

Determining Plutonium Concentration in Solution Using a Germanium Crystal and a New L X-Ray/p-Ray Spectrographic Method, Raymond C. Gatti, Heino Nitsche, Scott A. Carpenter, Kevin E. Roberts, Becraft Kevin A. and Traudel G. Prussin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2719-2729.

Developments in Dredges during the last decade, Ruud Ouwerkerk and Hans Greve, (*Dredging '94*, E. Clark

McNair, Jr., ed., 1994), p690-700.

Fate/Transport Modeling and Remediation of Contaminated Plume at Vance Airforce Base, Avdhesh K. Tyagi and Sharon H. Carpenter, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p287-292.

Groundwater Remediation at a Superfund Site, Henry Y. He, Jing-Yea Yang and Gregory Powell, (Hydrauly 1-He, Jing-Yea Yang and Gregory Powell, (Hydrauly 1-gineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p28-2-286. Impact of System Chemistry on Electroosmosis in Contam-

inated Soil, Gerald R. Eykholk and David E. Daniel, GT

May 94, p797-815.

Integrated Spacecraft Environments Model (ISEM), Ray Rantanen and Tim Gordon, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p609-617.

Modeling of Interaction of Small Particulates in Earth Orbit, Anthony F. Beverina and Christopher A. Dobosz, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p597-608.

Prediction and Verification of Atrazine Adsorption by PAC, Shaoying Qi, Samer S. Adham, Vernon L. Snoeyink and Ben W. Lykins, Jr., EE Jan./Feb. 94, p202-218.

Remediation of Contaminated Soils by Solvent Flushing, Denie C. M. Augustijn, Ron E. Jessup, P. Suresh C. Rao

and A. Lynn Wood, EE Jan./Feb. 94, p42-57.

Dil Washing and Biotreatment of Petroleum-Contaminated Soils, Alok Bhandari, Dennis C. Dove and John T. Novak, EE Sept./Oct. 94, p1151-1169.

A Systems Approach to the Management of a Contaminated Metal Recycle Project, Layne Pincock and Steven Wahnachaffe, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Commitment, High Level Radioactive Waste Program Commitment, High Level Radioactive Waste Program Commitment, 1988 (1988) tee, 1994), p1069-1073.

Vibratory Mobilization of Immiscible Liquid Ganglia in Sands, Lakshmi N. Reddi and Sreedhar Challa, EE Sept./Oct. 94, p1170-1190.

"So You Want to Remediate Contaminated Mud! These are Your Five Choices.", Louis J. Thibodeaux, Danny D. Reible and Kalliat T. Valsaraj, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p588-595.

Continental shelves

The Continental Shelf: A Source for Naturally-Delivered Beach Sand, Robert H. Osborne, Kelly A. Ahlschwede, Beach Sand, Robert H. Usborne, Relly A. Anlischwedt, Sean D. Broadhead, Kyung Cho, Joshua R. Feffer, Arthur C. Lee, Jinyou Liu, Craig Magnusen, Janette M. Murrillo de Nava, Rory A. Robinson, Chia-Chen Yeh and Yi Lu, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p335-349.

Inner Continental Shelf Transport Processes: The Middle Atlantic Bight, L. D. Wright, O. S. Madsen, T. A. Chisholm and J. P. Xu, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed.,

1994), p867-878.

Contingency

Refinement of Cost Estimates with Artificial Neural Nets, Irtishad U. Ahmad and Syed T. Rahman, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

Continuing education

ASCE's Proposed Program for Continuing Professional Development (April 1994), NE Sept. 94, p4.

Continuing Education Does Not Necessarily Educate (ltr), CE Nov. 94, p31-32.

Continuing Education: Some Typical Questions Raised and Answered, NE Sept. 94, p5.

Don't Mandate Continuing Professional Development (ltr).

CE Mar. 94, p36. Take Moderate Approach to Professional Development (ltr), CE Mar. 94, p33,35.

Continuous beams

Continuous Dynamic Model for Tapered Beam-Like Structures, Ji Yao Shen, Elias G. Abu-Saba, William M. McGinley, Lonnie Sharpe, Jr. and Lawrence W. Taylor, Jr., AS Oct. 94, p435-445.

Continuum Model for Analysis of Multiply Connected Per-forated Cores, Domenico Capuani, Marco Savoia and Ferdinando Laudiero, EM Aug. 94, p1641-1660.

Continuous structures

Prestress Influence on Shear-Lag Effect in Continuous Box-Girder Bridge, Shih Toh Chang, ST Nov. 92, p3113-3121.

Reliability Assessment of Continuously Reinforced Concrete Pavements, Angela J. Weissmann, B. Frank McCullough and W. Ronald Hudson, TE Mar./Apr. 94, p178-192.

Continuum hypothesis

Advanced Continuum Traffic Flow Models for Congested Freeways, Anastasios S. Lyrintzis, Ping Yi, Panos G. Michalopoulos and Dimitrios E. Beskos, TE May/June 94, p461-477.

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Discretization Influence on Regularization by Two Localization Limiters, Antonio Huerta and Gilles Pijaudier-Cabot, EM June 94, p1198-1218.

Equivalent Continuum Model for Deployable Flat Lattice Structures, Charis Gantes, Jerome J. Connor and Robert D. Logcher, AS Jan. 94, p72-91.

Localization Analysis of Nonlocal Model Based on Crack Interactions, Milan Jirásek and Zdeněk P. Bažant, EM July 94, p1521-1542.

Nonlocal Damage Theory Based on Micromechanics of Crack Interactions, Zdeněk P. Bažant, EM Mar. 94, p593-617.

Probabilistic Nonlocal Damage Model for Continua with Random Field Properties, J. Carmeliet and H. Hens, EM Oct. 94, p2013-2027.

Shear Effects on the Free Vibrations of Coupled Shear Walls, G. Q. Li and B. S. Choo, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1727-1734.

Shear Effects on the Static Behaviour of Stiffened Pierced Walls, B. S. Choo and G. Q. Li, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1719-1726.

Wave Attenuation in Elastic Continuum with Attenuating Neighborhood, Songtao Xue, Jun Tobita and Masanori Izumi, EM Mar. 94, p419-430. Contract administration

Application of Dredge Monitoring Systems to Dredge Contract Administration Quality Assurance, Stephen H. Scott and Jeffrey D. Jorgeson, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p776-785.

Construction Claims and Disputes: Causes and Cost/Time Overruns, Cheryl Semple, Francis T. Hartman and George Jergeas, CO Dec. 94, p785-795.

The Contractor-Subcontractor Relationship: The Subcon-

tractor's View, Jimmie Hinze and Andrew Tracey, CO June 94, p274-287.

McDonough, Patrick A. McGeehin and Steven Kmieciak, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1305-1314.

Interpretation of Construction Contracts, H. Randolph Thomas, Gary R. Smith and Robert E. Mellott, CO June

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The Job-Order Contracting Solution, Leif T. Erickson and Patrick D. Murphy, CE Apr. 94, p68-70.

Marathon Battery Superfund Project - A Review of Design, Construction and Lessons Learned, Michael P. Taylor, Pamela N. Tames and Alan R. Elia, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1210-1219.

Partnering: A Team Building Approach to Quality Construction Management, Osama Abudayyeh, ME Nov./ Dec. 94, p26-29.

Contract terms

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Construction Claims and Disputes: Causes and Cost/Time Overruns, Cheryl Semple, Francis T. Hartman and George Jergeas, CO Dec. 94, p785-795. The Contractor-Subcontractor Relationship: The Subcon-

tractor's View, Jimmie Hinze and Andrew Tracey, CO June 94, p274-287.

Contractors' Construction-Claims Avoidance, George F. Jergeas and Francis T. Hartman, CO Sept. 94, p553-560. Early-Completion Schedules: The Promise and Pitfalls, Roy Mendelsohn, ME Jan./Feb. 94, p28-30.

Geotechnical Baseline Reports, Teresa Austin, CE Dec. 94, p56-57.

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Interpretation of Construction Contracts, H. Randolph Thomas, Gary R. Smith and Robert E. Mellott, CO June

94, p321-336.

Software Eases Contract Drafting, CC Feb. 94, p7-8. Strategies for Avoiding Civil Liability, Robert W. Day, EI July 94, p265-269.

Contracting

Bonding Easier in '94, Study Predicts, CE Mar. 94, p8.

Computer-Based Risk Assessment of Competitive Procurement, Larry G. Crowley, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1540-1547

Design/Build Prequalification System, Kevin J. Potter and Victor Sanvido, ME Mar./Apr. 94, p48-56.

The Job-Order Contracting Solution, Leif T. Erickson and Patrick D. Murphy, CE Apr. 94, p68-70. Procurement Issues, Delon Hampton, ME Nov./Dec. 94,

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Design of Open-Channel-Contraction Transitions, Prabhata K. Swamee and Bharat C. Basak, IR May/June 94, p660-668

Effect of Bridge Pier Shape and Contraction Ratios on Backwater Profile, Sabah Al-Nassri, (Hydraulic Engi-neering '94, George V. Cotroneo, ed. and Ralph R. Ru-mer, ed., 1994), p563-568.

Heterogeneous Hardening Plasticity Model for Concrete, H. C. Chan, Y. K. Cheung and Y. P. Huang, ST Jan. 94, p46-62.

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The Continuing Saga of Home-Office Overhead Claims, CE July 94, p32.

Contractor Must Register as Nonresident to Recover Payment, CE Sept. 94, p27.

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Court Upholds the Denial of Contractor Damages, CE Feb. 94, p27.

Geotechnical Baseline Reports, Teresa Austin, CE Dec. 94, p56-57.

Hurricane Andrew's Effect on Manufactured Housing, Mike Mafi, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p158-165.
Improving Contractors' Bids Using Preference Reversal
Phenomenon, Richard de Neufville and Jayme Todd

Smith, CO Dec. 94, p706-719.

Improving Effectiveness of Equal Business Opportunity Programs, Zuhair El-Itr and Roozbeh Kangari, El July 94, p295-312.

Minority Contractors: Framework for New Policy Development, Zuhair El-Itr and Roozbeh Kangari, CO Sept. 94, p632-648.

Optimal Markup Policy in Sequential Competitive Bid-ding, Hongbin (Ben) Chen, Robert I. Carr and Photios G. Ioannou, (Computing in Civil Engineering, Khalil G. Ioannou, (Computing in Civit Engineering, Knam Khozeimeh, ed., 1994), p1548-1555.
 Partnering: A Team Building Approach to Quality Construction Management, Osama Abudayyeh, ME Nov./

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Predicting Construction Contract Surety Bond Claims Using Contractor Financial Data, Gordon D. Severson Jeffrey S. Russell and Edward J. Jaselskis, CO June 94, p405-420 Subcontractor Must Uphold Indemnification Promise, CE

Mar. 94, p27.

Surety's Liability: No Release in Sight, CE Sept. 94, p27. A Value Chain Model to Support Business Process Reengineering in Turnkey Contracting Firm, K. C. Choi, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1575-1582.

Average-Bid Method—Competitive Bidding Strategy, Photios G. Ioannou and Sou-Sen Leu, CO Mar. 93, p131-147.

Avoiding Contract Waiver, CE May 94, p40.

Bidding Model for Refurbishment Work, Teo Ho Pin and W. F. Scott, CO June 94, p257-273.

Builders Don't Have to be Perfect, CE Jan. 94, p27. Choosing Appropriate Construction Contracting Method, Christopher M. Gordon, CO Mar. 94, p196-210.

Cities Beware: Bidders Must be Treated Equally, CE June 94, p30.

Connecticut Bridge-Deck is Weekend Wonder, CE Dec. 94, p21,23.

Construction Manager Not Obligated to Pay Trade Contractor, CE Nov. 94, p36. Contractor Must Notify Supplier or Get the Goods, CE

June 94, p30. Contractors' Construction-Claims Avoidance, George F. Jergeas and Francis T. Hartman, CO Sept. 94, p553-560.

Contractual Relationship Not a Necessity for Lawsuit, CE Jan. 94, p27.

Critical Analysis of Time and Cost of Management and Traditional Contracts, Shamil G. Naoum, CO Dec. 94,

Defining Third-Party Liability, CE Jan. 94, p36.

Dredging Equipment, Methods and Contracts, Gregory E. Breerwood, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p509-515.

Economic Liability Exceeds Contractual Boundaries, CE Apr. 94, p27.

General Contract Documents Called for Arbitration, CE May 94, p30.

Heads I Win, Tails You Lose, CE Apr. 94, p8.

Hong Kong: The US\$10 Billion Dollar Question, Julian Weiss, WP Special issue 94, p31-34.

Hypertext and Claim Analysis, Geoffrey Bubbers and John Christian, CO Dec. 92, p716-730.

The Iran Market, WP Special issue 94, p5. On Getting Paid, WP Special issue 94, p5.

Process Model for Public Sector Design-Build Planning, Anthony D. Songer, C. William Ibbs and Thomas R. Napier, CO Dec. 94, p857-874.

Safety at the Site, Virginia Fairweather, CE Aug. 94, p50-53.

Software Eases Contract Drafting, CC Feb. 94, p7-8.

Subcontractor's Indemnity is Limited, CE July 94, p24.
System Impacts of Fuel (Age and Burnup) Selection, Flora Emami, William Bailey and Mark Fleming, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1538–1542.

Third Party Not Liable for Negligence, CE June 94, p30.Vietnam: Taming the Tiger, Irwin Jay Robinson, WP Spring 94, p6-8.

Water on Stone, Keri Wyatt Kent, WP Spring 94, p37-40.

Contracts, claims

Avoiding Contract Waiver, CE May 94, p40.

Dredging in 3D - Delays, Damages and Disputes, Frank McDonough, Patrick A. McGeehin and Steven Kmieciak, (Dredging '94, E. Clark McNair, Jr., ed., 1994), pl 305-1314.

Contro

Applications of Optimal Hydraulic Control to Ground-Water Systems, David P. Ahlfeld and Manoutchehr Heidari, WR May/June 94, p350-365.

Biological Reduction of Chromium by E. COLI, Hai Shen and Yi-Tin Wang, EE May/June 94, p560-572.

Civilian Structures: Taking the Defensive, Paul Weidlinger, CE Nov. 94, p48-50.

Construction Robot Force Control in Cleaning Operations, Y. Zhou and M. J. Skibniewski, AS Jan. 94, p33-49.

Downstream Control Algorithm for Irrigation Canals, Fubo Liu, Jan Feyen and Jean Berlamont, IR May/June 94, p468-483.

Extended Set Control of Concrete, Emmanuel K. Attiogbe and Hamid Farzam, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p137-146.

On the Dynamics and Control of Flexible Orbiting Systems: An Approach with Application, V. J. Modi and A. Suleman, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1-17.

Real-Time Control of Aerobic-Anoxic Sludge Digestion Using ORP, David G. Wareham, Kenneth J. Hall and Donald S. Mavinic, EE Jan./Feb. 93, p120-136.

Semiactive Motion Control Using Variable Stiffness, David

Semiactive Motion Control Using Variable Stiffness, David C. Nemin, Yingjie Lin and Roberto A. Osegueda, ST Apr. 94, p1291-1306.

Simplified Dynamic Method for Pile-Driving Control, Robert Y. Liang and Abdallah I. Husein, GT Apr. 93, p694-713.

Use of GPS for Tethered Satellite Position Determination, Bjorn L. Johns and George W. Morgenthaler, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p64-79.

Control equipment

Selecting Controls for Water Distribution Systems, J. Paul Tullis, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p43-61.

Control structures

Behavior of Cast-Iron Spillway Gate Wheels, Dimos Polyzois and Walter J. Muzyczka, MT Nov. 94, p495-512. Computation Method for Regulating Unsteady Flow in

Open Channels, Fubo Liu, Jan Feyen and Jean Berlamont, IR Sept./Oct. 92, p674-689.

Multiobjective Optimization of Actively Controlled Structures, S. S. Rao, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p276-285.

Optimization of Controlled Structures: Using H. Theory, N. S. Khot and D. E. Veley, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p266-275.

Steep Constructed Stream Channels and Chutes, Kenneth R. Wright, F. Robert McGregor and Gary Lacy, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p657-661.

Using a Small Satellite Bus As a Dedicated Platform for On-Orbit CSI Experiments, Andrew S. Bicos and Gregory G. Loboda, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994b, p37-46.

Using the Weir Back as an Energy Dissipator, Abdelkawi Khalifa, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p436-441.

Control surveys

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Creation of Land Information System for Milwaukee County, Wisconsin, Kurt W. Bauer, SU Nov. 94, p156-165.

Modeling of GPS Systematic Errors in Monitoring and Control Surveys, Adam Chrzanowski and Yong-qi Chen, SU Nov. 94, p145-155.

Quality in Constructed Project: Surveying Engineering, Gunther Greulich, Wayne H. Valentine and R. R. Chamard, SU May 94, p52-61.

Control systems

2D Bar-Code Applications in Construction, Bob G. McCullouch and Kamolwan Lueprasert, CO Dec. 94, p739-752.

Canal-Control Needs: Example, A. J. Clemmens, G. Sloan and J. Schuurmans, IR Nov./Dec. 94, p1067-1085.

Control of Hysteretic System Using Velocity and Acceleration Feedbacks, J. N. Yang, Z. Li and S. C. Liu, EM Nov. 92, p2227-2245.

Data Management for Large-Scale Water-Distribution Optimization Systems, S. Pezeshk, WR Jan./Feb. 94, p116-120.

The Effect of Mobile Transporter Motion on the Space Station Attitude Control System, Tsay-Hsin G. Hu, Jalal Mapar and Ben C. Barker, (Engineering, Construction, and Operations in Space IV. Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p453-462.

The Engineer Vehicle Tele-operation Capability, David J. Busse and Joseph R. Urda, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p474-480.

Feasibility Study of Adaptive Control of Structures Under Seismic Excitation, R. A. Burdisso, L. E. Suarez and C.

R. Fuller, EM Mar. 94, p580-592.
Generalization of Optimal Control Theory: Linear and Nonlinear Control, J. N. Yang, Z. Li and S. Vongchavalikul, EM Feb. 94, p266-283.

Generalized Object Control and Assembly for Space Robots, Jeff Russakow and Stephen Rock, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p149-157.

Human Extender: A Material Handling System, H. Kazerooni, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p37-43.

Hydro Plant Research Data Acquisition System, James E. Donegan, Julia Crittenden Tarbell and John F. Doyle, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p477-481.

An Integrated Approach to the Real-Time Control of Water Supply and Distribution Systems, Chun-hou Orr and Bryan Coulbeck, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p850-854.

Intelligent Excavator Control for a Lunar Mining System, Paul J. A. Lever, Fei-Yue Wang and Deqian Chen, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p97-105.

Interactions Between the Space Station Freedom Attitude Control System and Space Shuttle Remote Manipulator Controller During On-Orbit Assembly Operations, James T. Kaidy, Jalal Mapar and Ben C. Barker, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p433-452.

Optimal Control of Water-Supply Pumping Systems, Lindell E. Ormsbee and Kevin E. Lansey, WR Mar./Apr. 94, p237-252.

Parallel Algorithms for Integrated Structural/Control Optimization, A. Saleh and H. Adeli, AS July 94, p297-314.

Real-Time Control for a Robotic Rebar Bender, Phillip S. Dunston and Leonhard E. Bernold, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p392-400.

Reliability and Response Control of R/C Buildings, A. H-S. Ang and D. de Leon, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1593-1599.

Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994, 0-87262-913-9,

490pp.

Sensing and Control for Robotic Masonry, Rami A. Rihani and Leonhard E. Bernold, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer,

ed., 1994), p410-418.

Use of Hydraulic Control Valves in Deep-Well Pump Station Design Under Low/No Discharge Pressure, Jorge A. Garcia and Les Coffman. (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p62-72.

Water-Level Control in Hydropower Plants, Oscar F. Jiménez and M. Hanif Chaudhry, EY Dec. 92, p180-193.

Convection

Experimental Heat Transfer and Fluid Flow Over Drift-Emplaced Canisters, William G. Culbreth and Satish Pattisam, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p772-779.

Heat Transfer Effects in Vertically Emplaced High Level Nuclear Waste Container, Samir F. Moujaes and Yao M. Lei, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994).

p816-822.

A Numerical Study of Convection Heat Transfer Within Enclosed Horizontal Rod-Bundles, M. Keyhani and L. Luo, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), n780-787

Stability Analysis of Rayleigh-Benard Convection in the Presence of Side Walls, P. Diplas and C. Dietz, (*Hydrau-lic Engineering '94*, George V. Cotroneo, ed. and Ralph

R. Rumer, ed., 1994), p82-86.
Vortex Convection Produced by V-Shaped Dihedral Obstruction, Takashi Asaeda, Pham Hong Son and Steven Armfield, HY Nov. 94, p1274-1291.

Convergence

Energy Loss at Combining Pipe Junction, Marc Serre, A. Jacob Odgaard and Rex A. Elder, HY July 94, p808-830.

Conversion

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p15.
Making the Switch to Metrication Easier, CC Apr. 94, p5.
Metric Design May Convert to Dollars, CE Nov. 94, p8.

Metrication? Let the Market Decide (ltr), CE Dec. 94, p29. Move to Metric? Internal Economy Couldn't Afford the Change (ltr), CE Apr. 94, p32-33.

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Conveyors

Pneumatic Conveying of Materials at Partial Gravity, Thomas A. Sullivan, Elissa Koenig, Christian W. Knudsen and Michael A. Gibson, AS Apr. 94, p199-208.

Cooling

Consideration of Calculated and Measured Weld Metal Cooling Rates for Welding High Strength Steels, Joseph M. Blackburn and Gene L. Franke, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1225-1232.

High-Burnup/Low Cooling-Time Fuel Carrying Capacity of the GA-4 and GA-9 Spent Fuel Shipping Casks, J. K. Boshoven and J. E. Hopf, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p913-917. Mixing of Thermal Discharges at Low Froude Numbers, C. Liang Lee and Patrick J. Ryan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p538-542.

Utilization of Liquid Carbon Dioxide for Planetary Exploration, Nobuki Kawashima, Ei-ichi Mizuno, Kazuya Takeda and Masaki Kojima, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1070-1076.

Cooling systems

Thermal Finite Element Analyses of 26 Waste Package Spent Nuclear Fuel Loading Configurations, A. O. Thompson and M. J. Plinski, High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994, p796-800.

Cooling towers

Cause of Deformed Shapes in Cooling Towers, Jean-François Jullien, Waeil Aflak and Yvan L'Huby, ST

May 94, p1471-1488.

Repair of a Cracked Cooling Tower Shell Based on Numerical Simulations, Thomas Huemer, Christian Kropik, Herbert A. Mang and Günther Meschke, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p887-896.

Ultimate Strength of R/C Cooling Tower Shell, Takashi Hara, Shiro Kato and Hiroshi Nakamura, (Spatial, Latice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p877-886.

Cooling water

Stratified Cooling Channel for Thermal Discharges, R. E. Baddour, EE Jan./Feb. 94, p242-253.

Cooperatio

Bridging the Gap Between Architecture and Engineering, Thomas L. Harrison, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1256-1261.

A Cooperative Agreement for Research on Radioactive Waste Management Between the United States Department of Energy and Atomic Energy of Canada Limited, Kenneth W. Dormuth and Robert A. Levich, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2409-2412.

The Declaration of Codependence, CE Aug. 94, p8.

Dispute Resolution Giving Way to Dispute Prevention, CE Apr. 94, p20.

Drawing Conclusions as to Environmental Regulation, William Whipple, Jr., Harlan Agnew, Michael L. Clar, Robert Fiehweg, Tad Foster, Howard Holme, Marshall Jennings, Jonathan Jones, Joan Lee, Jan Rosholt, Charles Sain, Kyle Schilling, Earl Shaver and Don Woodward, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), 9258-271.

The Evolving Role of Marinas as Public Marine Parks and Water Recreation Areas in Southern California 1960-1994, John C. Corrough, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A.

Klancnik, ed., 1994), p39-48.

A Framework for Collaborative Distributed Facility Engineering, Taha Khedro, Michael R. Genesereth and Paul M. Teicholz, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1489-1496.

Future Concerns in Environmental Engineering Graduate Education, Richard G. Luthy, David A. Bella, James R. Hunt, James H. Johnson, Desmond F. Lawler, Charles R. O'Melia and Frederick G. Pohland, El Oct. 92, p361-380.

Holistic Approach to Irrigation Management in Developing Countries, Phillip Z. Kirpich, IR Mar./Apr. 93, p323-333.

Infrastructure Management: U.S. and Japanese Systems Contrasted, Neil S. Grigg, UP Mar. 94, p1-13.

Involving the People: Re-Connecting American Citizens to their Local Government, John R. Henderson, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p377-386.

U.S. / Japan Large Scale Cooperative Research Program for Steel Structures, Robert D. Hanson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p103-108.

A Version and Configuration Scheme for Collaborative Engineering, Karthik Krishnamurthy and Kincho Law, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2022-2029.

Cooperative education

Course-in-a-Box, CE Mar. 94, p76-77.

3-D Coordinates - A Universal Rectangular Coordinate System for a GIS and Other Spatial Databases, Earl F. Burkholder, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p233-240.

Localized Sigma Coordinates for the Vertical Structure of Hydrodynamic Models, Angré B. Fortunato and António M. Baptista, (Estuarine and Coastal Modeling III, Mal-colm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p323-335.

Observations Related to the Use of the Sigma Coordinate Transformation for Estuarine and Coastal Modeling Studies, John F. Paul, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p336-350.

Coordination

Precepts of Project Management, David J. Kerkes, CE Sept. 94, p70-72.

Survey and Alignment of Particle Accelerators and Transport Lines, Robert E. Ruland, SU Feb. 94, p11-24.

Controlling Lead and Copper Corrosion and Sequestering of Iron and Manganese, Jonathan A. Clement, Michael Schock and Darren Lytle, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p1-8.

Costs and Benefits of Meeting the San Francisco Bay Copper Objective by Regulating Small Treatment Plants, Steven X. McHaney, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p1232-1236.

Coupled Mass-Transport and Chemical-Equilibrium Modelling of Bronze Disease, M. B. McNeil and J. C. Walton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1014-1019

Effect of Alkalinity on Copper Corrosion, Travis E. Meyer and Marc Edwards, (Critical Issues in Water and Waste-water Treatment, Joseph N. Ryan, ed. and Mare Ed-

wards, ed., 1994), p9-16.

The Effects of NOM and Coagulation on Copper Corrosion, John P. Rehring and Marc Edwards, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p26-33.

Evaluation of Fe oxide-coated GAC for removal and recovery of Cu(II) from water, T. C. Wang, K. P. Chandra and P. R. Anderson, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p225-232.

Impact of System Chemistry on Electroosmosis in Contam inated Soil, Gerald R. Eykholk and David E. Daniel, GT

May 94, p797-815.

Modeling Issues of Copper Solubility in Drinking Water, Michael R. Schock, Darren A. Lytle and Jonathan A. Clement, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p17-25.

Performance Assessment of the Copper/Steel Canister, Patrik Sellin, Torsten Eng and Lars Werme, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1020-1029.

Recovery and Recycling of Copper from Wastewater using Iron Coated GAC, Kotha P. Reddy, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p392-399.

Coral reefs

Hurricane Iniki Effects on Coral Sand and Beach Processes on Kauai, Hans-Jürgen Krock and Doug Neill, (Hurri-canes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p782-790.

Theory and Observation of Currents and Setup Over a Shallow Reef, Graham Symonds, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicho-

las C. Kraus, ed., 1994), p1-13.

Corbels

Behavior of Reinforced High-Strength-Concrete Corbels, Yook-Kong Yong and P. Balaguru, ST Apr. 94, p1182-

Core

Continuum Model for Analysis of Multiply Connected Per-forated Cores, Domenico Capuani, Marco Savoia and Ferdinando Laudiero, EM Aug. 94, p1641-1660.

High-Order Bending of Sandwich Beams with Transverse-ly Flexible Core and Nonparallel Skins, D. Peled and Y. Frostig, EM June 94, p1255-1269.

Plenty of this Sample to go Around, CE Oct. 94, p8.

Seismic Vulnerability of Flat Slab - Core Buildings, Somaprasad R. Hosahalli and Ahmet E. Aktan, ST Feb. 94, p339-359.

Core walls

Building A Barrier Wall Through Boulders, Donald R. McMahon, Michael J. Mann and Robert C. Tulett, CE Oct. 94, p60-62.

A Deep Soil Mix Cutoff Wall at Lockington Dam, Ohio, Andrew D. Walker, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p133-145.

DSM Saves the Dam, Andrew D. Walker, CE Dec. 94, p48-51.

Honolulu Project's Soil-mix Cutoff Wall is a U.S. First, CE Jan. 94, p90.

Corners

Alternative Approach to Estimation of Critical Cornering Speed, John D. Leonard, II, TE May/June 94, p478-496.

Correlation analysis

Resilient Moduli of Granular Materials, Musharraf Zaman, Dar-Hao Chen and Joakim Laguros, TE Nov./Dec. 94,

Strange Attractors and Chaos in Wastewater Flow, Donald I. Angelbeck and Rafic Y. Minkara, EE Jan./Feb. 94, p122-137.

A Bridge-Deck Deal Without Reinforcing Steel, ET Dec. 94/Jan. 95, p1,6.

Calculation of k_{ett} For Plutonium in High-Level Waste Packages, Paige R. Zielinski and William G. Culbreth, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p679-683.

Chemical Cleaning Process for Water Pipe Systems, Craig Edstrand, Allen Hieatt and Jerome Ludwig, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p288-295.

Corrosion Fatigue of Stiffened Offshore Steel Tubular Joints, D. S. Ramachandra Murthy, A. G. Madhava Rao and A. R. Santhakumar, ST July 94, p1991-2010.

Corrosion Scenario Development for Corrosion Lifetime Prediction of Carbon Steel Used for Geological Disposal Package, Takanori Fukuda, Guen Nakayama and Masatsune Akashi, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p977-983.

Coupled Mass-Transport and Chemical-Equilibrium Modelling of Bronze Disease, M. B. McNeil and J. C. Walton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p1014-1019.

Effect of Alkalinity on Copper Corrosion, Travis E. Meyer and Marc Edwards, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p9-16.

The Effects of NOM and Coagulation on Copper Corrosion, John P. Rehring and Marc Edwards, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p26-33.

Evaluation of Corroded Steel Chimneys, Tadeusz Nawrot and Andrzej S. Nowak, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p349-354. Fatigue Strength of Weathered Rolled Beam Made of

A588 Steel, Pedro Albrecht and Camille Shabshab, MT

Aug. 94, p407-428.

Long Term Stability of Natural Glasses, Vladimír Knob-loch and Lumír Nachmilner, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p1066-1068. Long-Term Effects of Neutron Absorber and Fuel Matrix Corrosion on Criticality, William G. Culbreth and Paige R. Zielinski, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p634-641.

Macrocell Corrosion of Bent Epoxy-Coated Bars, Khaled Kahhaleh, James Jirsa, Ramon Carrasquillo and Harovel Wheat, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p8-15.

Magnesium-Sodium Sulfate Attack in Plain and Blended Čements, Rasheeduzzafar, Omar Saeed Baghabra Al-Amoudi, Sahel N.i Abduljauwad and Mohammad Maslehuddin, MT May 94, p201-222.

Maintaining Reliability of Concrete Structures. I: Role of Inspection/Repair, Yasuhiro Mori and Bruce R. Elling-

wood, ST Mar. 94, p824-845.

Maintaining Reliability of Concrete Structures. II: Optimum Inspection/Repair, Yasuhiro Mori and Bruce R. El-lingwood, ST Mar. 94, p846-862.

Middle Eastern Concrete Deterioration: Unusual Case His-

tory, Jerome P. O'Connor, CF Aug. 94, p201-212.

Modeling Issues of Copper Solubility in Drinking Water, Michael R. Schock, Darren A. Lytle and Jonathan A. Clement, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p17-25.

Models for Source Term, Flow, Transport and Dose Assessment in NRC's Iterative Performance Assessment, Phase 2, Timothy McCartin, Richard Codell, Robert Neel, William Ford, Rex Wescott, John Bradbury, Budhi Sagar and John Walton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1469-1479. Multi-Barrier Borehole Canister Designs for a Tuff Reposi-

tory, David E. James, Robert L. Skaggs and Suneeta Mohansingh, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Commit-

tee, 1994), p650-657. Near-Field Thermal Calculations for Individual Waste Package Placement, Suresh Lingineni, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p611-618.

A New Basic Principle for a New Series of Hydraulic Measurements. Erosion by Abrasion, Corrosion, Cavitation and Sediment Concentration, Lucien Chincholle, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p301-310.

Performance Assessment of the INEL Spent Fuel and HLW in Two Hypothetical Repositories, Larry L. Taylor, Robert P. Rechard, Henry H. Loo, Ronald D. Klinger and Leonard F. Ermold, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1508-1513.

A Probabilistic Approach to Assessing Radioactive Waste Container Lifetimes, Fiona M. Porter, Chris C. Naish and Susan M. Sharland, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p1008-1013.

Racine's Water Street Retaining Wall, Steven W. Hunt, Randy L. Frank, Paul A. Tarvin and James J. Blazek, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p137-154.

Raw Water Cement-Mortar Lined Pipeline Corrosion A Case Study, Charles F. Anderson, Jr., (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p372-386. Rebar Corrosion and Sulfate Resistance of Blast-Furnace Slag Cement, A. S. Al-Gahtani, Rasheeduzzafar and S. S. Al-Saadoun, MT May 94, p223-239.

A Reliability Model for Fatigue and Corrosion of Hydraulic Steel Structures, Joseph Padula, Cameron Chasten, Paul Mlakar and Reed Mosher, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1217-1224.

Reliability of Underground Pipelines Subject to Corrosion, M. Ahammed and R. E. Melchers, TE Nov./Dec. 94,

p989-1002.

Shaffer, Thomas F. R. Winston Revie and Anita Mandal, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p696-704.

The Use of Iron Salts to Control Dissolved Sulfide in Districts' Trunk Sewers, Navnit A. Padival, William A. Kimbell and John A. Redner, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p743-750.

Using Hydrophones to Monitor Prestressed Concrete Pipe salg rydropholes to Molinor Frestressez Collecter Pro-for Reinforcing Wire Failures, Douglas J. Buchanan, Malin L. Jacobs and Fred A. Travers, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p212-225.

Corrosion control

Bonded Tendon Debate, Morris Schupack, CE Aug. 93, p64-66.

Chloride Extraction and Re-Alkalization of Reinforced Concrete Stops Steel Corrosion, Emmanuel E. Velivasakis, Sten K. Henriksen and Richard Hauer, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1127-1134.

Concrete Columns Reinforced with Fiber Reinforced Plastic Rebars, Saeed Daniali and Noel S. Paramanantham, (Infrastructure: New Materials and Methods of Repair,

Kim D. Basham, ed., 1994), p567-574.

Controlling Lead and Copper Corrosion and Sequestering of Iron and Manganese, Jonathan A. Clement, Michael Schock and Darren Lytle, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p1-8.

Corrosion Resistant Epoxy-Coated Reinforcing Steel, Robert G. Mathey and James R. Clifton, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p109-115.

Crack Width Control with Engineered Cementitious Composites in R/C Structures, Mohamed Maalej and Victor C. Li, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p359-366.

Internal Pipeline Corrosion Coatings Case Studies and Solutions Implemented, Ronald E. Carlson, Jr., (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H.

Wegener, ed., 1994), p206-211.

Monitoring and Predicting Corrosion of Weathering Steel, Richard D. Granata, James C. Wilson and John W. Fisher, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1209-1216.

Performance of New York's Long-span Bridges, Satinder P. S. Puri, Richard J. Kratky and Maria Grazia Bruschi, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1022-1031.

Ship Fabrication Innovations (Naval & Commercial), Raymond H. Juers and Kevin Lynaugh, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p344-350.

Water Chemistry of Lead Corrosion Control, Leland L. Harms, Jonathan A. Clement and Michael R. Schock, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p34-

Corrosion resistance

Concept for Hazardous Material Management and Container Closure Using Copper Based Alloys, Holt Murray, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1000-1007.

Corrosion of HLW Carbon Steel Containers in the Vapor Phase of Salt Brines, E. Smailos, (High Level Radioactive Waste Management, High Level Radioactive Waste

Program Committee, 1994), p963-968.

Lightweight Concrete - A Proven Material for Two Millennia, Theodore W. Bremner, Thomas A. Holm and Valentina F. Stepanova, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p37-51.

Multi-Barrier Waste Package Fabrication and Closure Development, Wayne E. Wallin, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p955-962.

The Present State-of-the-Art of Immobilization of Hazardous Heavy Metals in Cement-Based Materials, David Bonen and Shondeep L. Sarkar, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p481-498.

Rebar Corrosion and Sulfate Resistance of Blast-Furnace Slag Cement, A. S. Al-Gahtani, Rasheeduzzafar and S.

S. Al-Saadoun, MT May 94, p223-239.

Corrugated plates

Behavior of Deeply Corrugated Steel Plate in Culvert, Alan F. Rauch, Shad M. Sargand and Glenn A. Hazen, ST May 94, p1651-1655.

Setting Competitive Water Reuse Rates, David D. Green and Stephen H. Riley, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p802-805.

Activity Based Costing in Water Resources Management, James P. Heaney and David J. Sample, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p632-636.

Asphalt-Rubber Hot Mix in Road Rehabilitation, Kirk L. Beaty, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p319-326.

Comparing Dredging Costs Across Projects, Gerald E. Greener and Greg Hartman, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1325-1334.

Cost Considerations in Planning Pier Terminals, E. S. Dada and S. C. Wirasinghe, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p183-192.

DBP Control in Drinking Water: Cost and Performance, Robert M. Clark, Jeffrey Q. Adams and Benjamin W. Lykins, Jr., EE July/Aug. 94, p759-782.

Development of Missouri River Navigation Analysis, David Gjesdahl and Arthur Hawnn, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p686-689

The Economic Cost of Stocking Catchable Rainbow Trout, Donn M. Johnson and Richard G. Walsh, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p549-552.

Equipment Management through Operational Failure Costs, Athanase I. Tsimberdonis and E. Lile Murphree,

Jr., CO Sept. 94, p522-535.

The Everett, Washington, Water Supply IRP, Dan Mathias, Lloyd Skinner and Lisa Tobin, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p404-407.

The Hidden Cost of Clean Air Regulations, Bernard H. Hertlein and Matthew R. Johnson, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1119-1126.

Light at the End of the Chunnel, Virginia Fairweather, WP Special issue 94, p10-13.

The MOUSE Uncertainty Analysis System, Albert J. Klee, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p372-379. Opportunities, Constraints and Change in Reservoir Management, William K. Johnson, David T. Ford and Ralph A. Wurbs, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p864-867.

Petroleum Contaminated Soils in Highway Construction, Jay N. Meegoda, A. Samer Ezeldin, David A. Vaccari and Robert T. Mueller, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994),

Predicting Changes in Construction Cost Indexes Using Neural Networks, Trefor P. Williams, CO June 94,

p306-320.

Rigid Pavement Rehabilitation at the San Marcos Municipal Airport, San Marcos, Texas, Franklin Hines and David Pickett, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p531-538.

To Microtunnel or Not to Microtunnel? The Construction of the Crown Point Trunk Sewer, Karen Larson Henry and Dave Zoumaras, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p73-

Valuation Analysis for Independent Power Project, Richard K. Ellsworth, EY Aug. 94, p86-96.

Waste Package Performance Allocation System Study Report, Richard D. Memory, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p969-976.

Construction Claims and Disputes: Causes and Cost/Time Overruns, Cheryl Semple, Francis T. Hartman and George Jergeas, CO Dec. 94, p785-795.

The Design of a Proactive Cost Feedback System for Construction Project Management, David N. Ford and Feniosky Pena, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1365-1372.

Emerging Technologies for Short-Span Bridge Solutions, M. Zoghi, D. A. Tomley and M. P. Henderson, (Infrastructure: New Materials and Methods of Repair, Kim

D. Basham, ed., 1994), p1163-1170. The Inflation Equation, Joao Otavio Brizola and Paul C.

Dinsmore, WP Special issue 94, p41-44.

Joint Optimization of Groundwater Remediation and Monitoring, Peter K. Kitanidis and Sang-Il Lee, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p525-528.

Victoria Sta. Iglesia's Firm is Like a Family, Where the Bottom Line is all About Relationships, NE Feb. 94, p1,8.

Cost effectiveness

Agricultural Infrastructure for Urban Irrigation, D. Heinert, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p339-342.

Asphalt-Rubber Hot Mix in Road Rehabilitation, Kirk L. Beaty, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p319-326.

Breakwater Design and Construction Harbor Centre Marina Sheboygan, Wisconsin, Tom Holtan, Dave Anglin, Dave Sanders and Larry Ryan, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p292-299.

Civilian Structures: Taking the Defensive, Paul Wei-

dlinger, CE Nov. 94, p48-50.

Cut and Cover Construction of the SSC Injector Tunnels, Mahendra P. Yajnik and Wayne Q. Hudler, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p749-754.

The Danby Pipe Renovation System, George McAlpine, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p144-158.

Effectiveness of Retrofit in Multi-Family Apartments, Roger Durand, Richard C. Allison and Judith Durand, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

Environmentally Compatible Marinas the Major Issues that Need to be Addressed in Designing New and Retrofitting Existing Marinas, Daniel S. Natchez, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p49-58.

Evaluation Framework for IVHS, Hong K. Lo, Arun Chatterjee, Frederick Wegmann, Stephen Richards and Ajay K. Rathi, TE May/June 94, p447-460.

The Everett, Washington, Water Supply IRP, Dan Mathias, Lloyd Skinner and Lisa Tobin, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p404-407.

Illinois Rehabs Rural Highways the Smart Way, CE May

94, p20,22.

Interfaces and interactions in the Swiss Waste Disposal Programme, C. McCombie, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p238-248.

The Job-Order Contracting Solution, Leif T. Erickson and Patrick D. Murphy, CE Apr. 94, p68-70. Large-scale Modeling of a Water-Distribution System, Christopher T. Stern, CC May 94, p1-7.

Liability Insurance for Design Professionals: Can't Live With It, Can't Live Without It? Robert A. Rubin, ME

Mar./Apr. 94, p18-23.

The Light at the End of the Sewer: How Interested Parties Negotiated a Consensus Solution to the Combined Sewer Overflow Problem, David S. Bailey, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p204-210.

The Long Term Radioactive Storage Alternative, Cyril W. Draffin, Jr., Richard G. Little and Richard Blauveit, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p13-17.

Marketing Professional Services in Asia, Shawn R. T. Severn and K. V. Lew, ME Sept./Oct. 94, p24-26.

Modular Evolution, Steven M. Shaker and Jeffrey H.

Greenwald, CE May 94, p64-67.

Optimization Studies of Anaerobic Expanded Bed Reactor Pretreatment of Domestic Wastewater, Thomas L. Theis, Bruce J. Alderman and Anthony G. Collins, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p289-296.

The Price is Right for Composite Canopy, CE May 94,

Proposed Rehabilitation of Storrow Drive Interchange Tunnel, Frank J. Heger, Atis A. Liepins and Paul L. Kelley, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1111-1118. Rehabbing for Remediation, David Banton and Robert An-

derson, CE Mar. 94, p64-65.

Remote Sensing of AstrofuelTM, K. R. Harris, H. Y. Khater and G. L. Kulcinski, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Startent Lebris 1908, 1908, 2009. Stanley Lokaj, ed., 1994), p648-657.

Robotic Opportunities for Hazardous-Waste Cleanup, Edward J. Jaselskis and Mary Rose Anderson, EE Mar./

Apr. 94, p359-378.

Sensitivity Analysis of Bridge Equations, Jeffrey S. Glenn, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p11-15.

Sewerage Rehabilitation Verified Simulation Modeling, Phil Wildbore, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measintrastructure Fauture Diagnostics and Kernetian Measures and Task Committee on Urban Drainage Rehabilita-tion Programs and Techniques, ASCE, 1994), p73-83. Solar Stretch, Jörg Schlaich, Rudolf Bergermann and Wolfgang Schiel, CE May 94, p47-50.

Space-Frame Pyramid, Michael D. Griffin, Michael R. Pat-terson and Tejav J. DeGanyar, CE Nov. 94, p68-70.

Specification Needs for FRP Composite Products, Craig A Ballinger, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p56-63.

Test for Polymer Overlay Interface on Concrete, Brian M. Deming, Haluk Aktan and Mumtaz Usmen, (Infrastruc-ture: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p709-715.

The Total System Approach to Efficient Pipeline Design, Randal W. Stuart, (*Hydraulics of Pipelines*, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p159-

Uncertain Reasoning in a Pavement Management System, B. N. O. Attoh-Okine, (Computing in Civil Engineering, Khalil Khorzingh ed. 1994) 2226 222 Khalil Khozeimeh, ed., 1994), p326-332.

Undersealing of Portland Cement Concrete Pavements: Does it Work? Ramzi Taha, Tom Papagiannakis and Ali Selim, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p163-169.

The Value of Illusion vs. the Illusion of Value - The Full Range of Recreational Amenities that are Needed for the Marina of Today and Tomorrow, Daniel S. Natchez, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p232-237.

Cost engineering

Construction Expertise Transfer with Knowledge Based Systems, Hans Björnsson and Bjarni P. Hjaroar, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p964-971.

A PC-Based Stochastic Project Scheduling and Costing Module, Kamalain K. Sha'ath and Gurdev Singh, (Computing in Civil Engineering, Khalil Khozeimeh, ed.,

1994), p9-16.

Cost estimates

Analysis of Structural Debris Generation and Disposal After Hurricane Andrew: Technical Perspective, Berrin Tansel, (Hurricanes of 1992: Lessons Learned and Im-plications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p533-538.

Building Construction Detailed Estimating Practices in Saudi Arabia, Kamal M. Al-Harbi, David W. Johnston

and Habib Fayadh, CO Dec. 94, p774-784.

Construction Estimating Software, Marc T. Pritchard, Tim Culligan and Rick Kimble, CC Feb. 94, p1-6.

Construction Expertise Transfer with Knowledge Based Systems, Hans Björnsson and Bjarni P. Hjaroar, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p964-971.

A Framework for a Database of Construction Costs and Productivity at the Process Level for Transportation Infrastructure Development, Antonio A. González-Quevedo, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1854-1858.

A Good Newsletter is Like the Perfect Employee, ME

Mar./Apr. 94, p2.

Heuristic Algorithm to Locate Solid-Waste Disposal Site, Narayanaswamy V. Ramu and William J. Kennedy, UP Mar. 94, p14-21.

Integrated System to Develop Highway Rehabilitation Projects, Sarosh I. Khan, Stephen G. Ritchie and Karl

Kampe, TE Jan./Feb. 94, p1-20.

Interactive Cost Estimating During Design, Robert I. Carr, Hyun-Soo Lee and Photios G. Ioannou, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1556-1563.

Master Planning -- "Fact or Fiction", Marcus D. Hodges (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p77-82.

Model to Estimate Highway Earthwork Cost in Nepal, Naresh Sthapit and Hiroshi Mori, TE May/June 94, n498-504

A Multi-Media System for Organizing Construction Documents, Rajaram Ganeshan, Simon Kim, Liang Liu and Annette Stumpf, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1381-1388.

An Object-Oriented Scheduling Data Acquisition Model Using a Hybrid Expert System, Kyungrai Kim, Calin M. Popescu and Gary D. Hamilton, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p356-361

Practical Approach to Cope with Construction Cost Uncertainty in an Inflationary Environment, Diego Echeverry and Jorge Garcia, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2149-2156.

Quantification of Cost Uncertainties Using Neural Network Technique, Awad S. Hanna and Li-Chung Chao, (Computing in Civil Engineering, Khalil Khozeimeh, ed.,

1994), p41-46.

Refinement of Cost Estimates with Artificial Neural Nets, Irtishad U. Ahmad and Syed T. Rahman, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1373-1380.

Streamlining Project Estimating and Scheduling, David Angelotti, CC Feb. 94, p11-13.

Synthetic Estimation of Development Cost of Satellite, Yi-Symmetre Estimation of Development Con-lin Zhu, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1512-1520. WATSUP: A Simulation Model for Water Supply Cost and

Reliability, Mark R. Jensen and Jay R. Lund, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p806-209

ARIANE-5 Launch Operations Construction and Operation of a New Launch Complex for Lower Cost, Higher Reliability Missions, Juan de Dalmau, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1521-

A Conceptual Study of A Solar Power Satellite Using Centrifugal Force, Hiroshi Yamakawa, Hiroshi Kanamori, Kenji Nozaki, Takeo Oura, Takanori Sato, Hisahito Tadokoro, Kenji Takagi, Hiroshi Ueno, Koji Oishi, Haruyuki Namba and Shinji Matsumoto, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p57-63.

Design of Branched-Water-Supply Network on Uneven Terrain, Brian Young, EE July/Aug. 94, p974-980. Dynamic Compaction: Two Case Histories Utilizing Innovative Techniques, Albert A. Bayuk and Andrew D.

Walker, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p55-67.

Heuristic Algorithm to Locate Solid-Waste Disposal Site, Narayanaswamy V. Ramu and William J. Kennedy, UP Mar. 94, p14-21.

Optimal Operation of Ground-Water Supply Distribution Systems, S. Pezeshk, O. J. Helweg and K. E. Oliver, WR Sept./Oct. 94, p573-586.

Optimal Rehabilitation Model for Water-Distribution Systems, Joong Hoon Kim and Larry W. Mays, WR Sept./ Oct. 94, p674-692.

Optimal Supply of Parking at Airports, Massoud Javid and Prianka N. Seneviratne, (Aviation Crossroads: Chal-lenges in a Changing World, William J. Sproule, ed., 1994), p174-182.

Pavement Renovation with HPI Electrochemical Method, Roland S. Jary, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p643-

Process Selection for Treatment of SOC Contaminated Waters, Bruce I. Dvorak, Desmond F. Lawler and Gerald E. Speitel, Jr., (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p601-608.

Redundancy-Constrained Minimum-Cost Design of Water-Distribution Nets, Heekyung Park and Jon C. Liebman, WR Jan./Feb. 93, p83-98.

Robotic Rehabilitation of Sewer Infrastructure, R. Laurence Day, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994),

p383-391. Scada System Requirements for Optimum Pumping, Vilas Nitivattanannon, Elaine C. Sadowski and Rafael G. Quimpo, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p110-

114. A Study of Jointless Bridge Behavior, D. Siros and C. Spy-

rakos, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p485-490.

Cost savings

Designing Under Uncertainty When We Can Reduce Uncertainty: When is Another Observation Worth the Cost? J. Wayland Eheart, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry

N. Tuvel, ed., 1994), p461-464.
Lesson Learned form Implementing M&I Optimal Water Delivery, Otto J. Helweg and Lindell E. Ormsbee, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p730-733.

Machine Makes Microtunneling Easy, CE July 94, p78.

Model for Optimal Design of Reinforced Concrete Beam, B. K. Chakrabarty, ST Nov. 92, p3238-3242.

Navigation Channel Design Using Real-Time Marine Sim-ulator, Dennis W. Webb, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1081-1090.

Precast Speeds Housing Construction, CE Mar. 94, p92.

Cost sharing

Salt River Project Strategic Water Resource Plan, Harold W. Thomas and Mark A. Emelity, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p234-237.

Alternative Launch Systems Will They Replace the Shuttle? Daphne Burleson, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p472-577.

Application of Pen Computing to Construction Inspection, Jason M. Jazayeri, Farid Jazayeri and Katherine Litchfield, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1438-1445

Austin's Strategy for Integrated Water Resource Planning, Tony T. Gregg, Maureen McReynolds and Eric Roth-Systems, Jerry R. Rogers, ed. and William P. Bullock, Jr., ed., 1994), p1-7.

Coastal and Oceanographic Impact of Hurricane Andrew, Hsiang Wang and Lihwa Lin, (Hurricanes of 1992: Les sons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p791-798

A Comparison of Propulsion Systems for Space Exploration, Ryan D. Hoover, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p751-755.

Computer Applications in Structural Analysis and Design, J. A. Bohinsky and J. P. Lee, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p462-465.

Contracting for Tiedback Walls on a Design-Build Basis, Hubert J. Deaton, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p17-23.

Creation of a Modernized Land Information System for Milwaukee County, Kurt W. Bauer, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p220.

Decision-Making Paradigm for Risk Assessment of Hazardous Wastes Using Fuzzy Sets, Timothy Ross, Joseph Trumm and Sunil Donald, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p200-207.

Drawing Conclusions as to Environmental Regulation, william Whipple, Jr., Harlan Agnew, Michael L. Clar, Robert Fiehweg, Tad Foster, Howard Holme, Marshall Jennings, Jonathan Jones, Joan Lee, Jan Rosbolt, Charles Sain, Kyle Schilling, Earl Shaver and Don Woodward, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p258-271.

Early-Completion Schedules: The Promise and Pitfalls, Roy Mendelsohn, ME Jan./Feb. 94, p28-30.

Energy Analysis of High Temperature Lunar Manufactur-ing Processes, Belinda Wong-Swanson and Rocco Fazzolari, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p697-707.

Engineering of the Building Envelope "To Do Or Not To Do", Norris Stubbs and Dale C. Perry, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p10-30.

Focus on High-Level Waste Repository Management and Regulation a Rate Regulator's Perspective, Emmit J. George, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1521-1524.

For the Realization of Lunar Concrete, Hiroshi Kanamori, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p942-951.

GIS Modeling of Neo-Traditional Neighborhood Development, John R. Stone, Thomas H. Wittmann and Jonathan L. Boone, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1131-1138.

Heavy Metal Removal Using Peat/Wetland Treatment, Suzanne Murawski, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p408-414.

How Many Observation Wells Does it Take to Find a Groundwater Contamination Plume? Bruce R. James and Steven M. Gorelick, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p197-199.

A Hypermedia Constructability System, Bob McCullouch and Bob Patty, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1397-1404.

Identification of Problems, Solutions, and Cost Savings for Maintenance of Drainageways, Mark R. Hunter, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p194-208.

Impact of Nuclear Waste Traffic on Highways, Peter E. Sebaaly, Raj Siddharthan and Jon A. Epps, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1255-1262

Impacts of Repository Thermal Loading on System Cost, L. D. Rickertsen and W. W. Matyskiela, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p586-591.

The Implementation of a Comprehensive Water and Waste-water Utility Development Fee Process to Allocate the Cost of New Development to the Beneficiaries, Kenneth M. Needham and Joyce Kinnear, (Revenue Enhancement for Water and Wastewater Systems, Jerry R. Rogers, ed. and William P. Bullock, Jr., ed., 1994), p24-30.

Interdiscipline Design Coordination Facilitated by CADD, James W. Langston, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1983-1989.

Is it Necessary to Compromise Engineering Ethics to Remain Competitive? Jim V. Anderson, El Oct. 94, p379-383

The Manufactured Home Dilemma, James R. McDonald, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p195-202.

Methodology for Comparing Lunar Settlement Designs,

Keith Trivelpiece, (Engineering, Construction, and Op-erations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994, p969-978.

MPC Closure Weld Model Study, Brain J. Kruse, Joe B. Stringer and Giles G. Childress, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p435-443.

Multi-purpose Canister Conceptual Design Approach, Nick L. Seagle, Giles G. Childress, III, James R. Thornton, David N. Summers and Alan H. Wells, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1143-1151.

Multi-Purpose Canister Criticality Control Design Fea-tures, James R. Thornton, Kelvin J. Montague, Alan H. Wells and Daniel A. Thomas, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p823-830.

Nuclear Propulsion: Safety Measures and Concerns, Lindsay N. Herron, (Engineering, Construction, and Opera-tions in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p747-750.

On the Benefits of an Integrated Nuclear Complex for Nevada, James A. Blink and William G. Halsey, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p18-25.

Potential demand for passenger travel to orbit, Patrick Col-lins, Yoichi Iwasaki, Hideki Kanayama and Misuzu Okazaki, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p578-586.

Range Estimating - User-Friendly Risk Analysis, Kevin M. Curran, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p47-54.

Ranking Ground-water Management Alternatives by Multicriterion Analysis, Lucien Duckstein, Wiktor Treichel and Samir El Magnouni, WR July/Aug. 94, p546-565.

Reactor Life: Impacts on Waste Management, Ronald R. MacDonald and Billy M. Cole, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p1562-1566. Reducing the Long-Term Effects of Zero-Gravity, Jeremi-ah Rogers and Sarah Coleman, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway,

tuon, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p833-836.
Removal of Arsenic by Enhanced Coagulation and Membrane Technology, S. David Chang, Hector Ruiz, William D. Bellamy, Carl W. Spangenberg and Debra L. Clark, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p632-639.
Selecting Present Concrete Puilding Science In the Company of the Compa

Selecting Precast Concrete Building Systems, John I. Messner, Victor E. Sanvido and Masaaki Ikeda, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p368-371.

Space Exploration: Getting a Handle on "Why?", Gordon R. Woodcock, (Engineering, Construction, and Opera-tions in Space IV, Rodhey G. Galloway, ed. and Stanley Lokaj, ed., 1994), p960-968.

Spacecab: A Concept for Commercial Human Spaceflight, Andrew Petro, Engineering, Construction, and Opera-tions in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1504-1511.

STRANDNET: A Top-Level Storage, TRANsportation & Disposal NETwork Systems Analysis Tool for Spent Nuclear Fuel Waste Management, Johnny Brock, Felix Godwin and Ray Mitchell, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1704-1711.

Team-Building Process: Key to Better Project Results, Robert Albanese, ME Nov./Dec. 94, p36-44.

Toward Integrated Design of Waste Management Technologies, Sam A. Carnes and Amy K. Wolfe, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p267-274.

Transport Infrastructure Choices for Industrial Cis-lunar

Traffic, John Sved, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p587-596.

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What Do SO₂ Emissions Cost? Allowance Prices and Externality Adders, Benjamin F. Hobbs, EY Dec. 94, p122-132.

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Nonlinear Response of Torsionally Coupled Base Isolated Structure, R. S. Jangid and T. K. Datta, ST Jan. 94, p1-

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Shear Effects on the Static Behaviour of Stiffened Pierced Walls, B. S. Choo and G. Q. Li, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1719-1726.

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Lake Michigan Diversion at Chicago, William H. Espey, Jr., Oscar G. Lara and Robert L. Barkau, (Hydraulic En gineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p175-181.

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Geosynthetic Loads in Landfills Slopes: Displacement Compatibility, J. H. Long, R. B. Gilbert and J. J. Daly, GT Nov. 94, p2009-2025.

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Acoustic Emission Monitoring of Fatigue Crack Growth in
HSLA-80 Steel Box Beams, Stephen Pessiki and Steven Derrah, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1334-1339.

Acoustic Emission Monitoring of Steel Bridges, A. K. Maji and T. Kratochvil, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1322-1327.

Application of Fracture Mechanics to Soils: An Overview, Luis E. Vallejo, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p1-20.
Behavior of RC Beams under Sustained Load, Nie Jianguo

and Shen Jumin, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p239-244.

Control of Random Crack Formation in Portland Cement Concrete Pavements, Yeou-Shang Jenq and Sang-Chel Kim, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p972-977.

Controlled Dynamic Cracking of High-Strength Concrete Specimens, David Z. Yankelevsky and Itzhak Avnon,

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Effects of Process Zones on Crack Interactions, K. R. Shah, J. F. Labuz and H. K. Stolarski, EM Dec. 94, p2678-

Fatigue Crack Growth Rate of Metal by Plastic Energy Damage Accumulation Theory, Wei Wang and Cheng-Tzu Thomas Hsu, EM Apr. 94, p776-795.

Fracture Mechanics and Plasticity in Saturated Clay, Adel S. Saada, Liqun Liang and Gary F. Bianchini, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p21-39.

Fracture Mechanics Applied to Geotechnical Engineering, Geotechnical Special Publication No. 43, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994, 0-7844-0056-3, 165pp.

Marta North Line Midtown Station, Jerzy T. Jacak and Cheryl L. McAfee, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p176-181.

Numerical Modeling of Tensile Crack Propagation in Concrete Dams, Ram Kumar and G. C. Nayak, ST Apr. 94, p1053-1074.

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Stability Theory of Cohesive Crack Model, Yuan N. Li and Robert Y. Liang, EM Mar. 92, p587-603.

Understanding Discrete Fracture Growth in Rock by Interpreting Acoustic Emissions, Steven D. Glaser, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p70-85.

Airport Reconstruction/Rehabilitation: A Case Study, Steven B. Cornell, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p516-

Analytical and Experimental Analyses of Fatigue Crack Propagation in Asphalt Concrete Overlays, R. Ballarini, G. C. Ferrante and J. L. Figueroa, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p978-983

Application of NLFM Models to Predict Cracking in Concrete Gravity Dams, Sudip S. Bhattacharjee and Pierre

Léger, ST Apr. 94, p1255-1271. Assessment of Distress Models for Prediction of Pavement Service Life, Dar-Hao Chen, Musharraf Zaman and Joakim G. Laguros, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1073-

1080. Assessment of Risk of Thermal Cracking in Hardening Concrete, Mats Emborg and Stig Bernander, ST Oct. 94,

Behavior of Reinforced High-Strength-Concrete Corbels, Yook-Kong Yong and P. Balaguru, ST Apr. 94, p1182-

Case Studies: Clay Cover Cracking Analysis Using FEM Techniques, Robert Y. Liang, John C. Lommler, Suckhong Lee and Bob Meyers, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p86-101.

Controlled Dynamic Cracking of High-Strength Concrete Specimens, David Z. Yankelevsky and Itzhak Avnon, MT Nov. 94, p564-577.

Crack Detection in Beams - Sensitivity Studies, Lidvin Kjerengtroen and Christopher Jenkins, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p483-490.

Crack Width Control with Engineered Cementitious Com-posites in R/C Structures, Mohamed Maalej and Victor posites in KA. Structures, informatical and Methods of C. Li, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p359-366.

Cracking and Fracture Behavior of Soil, Hsai-Yang Fang, (Fracture Mechanics Applied to Geotechnical Engineer ing, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p102-117.

Delayed Ettringite Formation, H. F. W. Taylor, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p122-131.

Dynamic Response of Steel Fiber Reinforced Concrete, David H. Sanders and Qiudong Wu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p833-838.

Expert System with Learning Ability for Retrofitting Steel Bridges, Ichizou Mikami, Shigenori Tanaka and Akira

Kurachi, CP Jan. 94, p88-102.

Failures of Residential Building Basements in Ohio, C. F. Diaz, F. C. Hadipriono and S. Pasternack, CF Feb. 94, p65-80.

Fatigue Cracking and Rutting in Flexible Pavements, D. V. Ramsamooj, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p132-146.

Fibre Reinforced Concrete - Myth and Reality, Sidney Mindess, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p217-222.

Finite Element Analysis of Shear in RC Girders, Pascal Casanova, Merret Fliedner, Pierre Rossi and Franz-Josef Ulm, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p223-229.

Finite-Element Modeling of Deformation and Cracking in Early-Age Concrete, René de Borst and A. H. van den Boogaard, EM Dec. 94, p2519-2534.

Flat-Plate Repairs Using Innovative Shotcrete Applica-tions, Avanti C. Shroff and Indrajit M. Mehta, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p971-982.

Flexural Member Bending Strength Limits in the New LRFD Bridge Code, Karl H. Frank, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p544-548.

Flexural/Tensile-Strength Ratio in Engineered Cementitious Composites, Mohamed Maalej and Victor C. Li, MT Nov. 94, p513-528.

Fracture Toughness of Compacted Cohesive Soils Using Ring Test, Jack A. Harison, Bobby O. Hardin and Kamyar Mahboub, GT May 94, p872-891.

Impulsive Punching of Fiber-Reinforced Concrete Slabs, Pietro G. Gambarova and Cristiano Schumm, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p252-257.

Mechanical Properties of Stone Mastic Asphalt, M. N. Partl, T. S. Vinson and R. G. Hicks, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p849-858.

The Mechanics of Cracking in Embankment Dams, James R. Talbot, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p118-131.

Montana Experience with Polymer Modified Asphalt, Murari Man Pradhan and Joseph D. Armijo, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p311-318.

NDE for Steel Bridges, Steven B. Chase, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1203-1208.

Penetration Fracture of Ice Plate: 2D Analysis and Size Effect, Yuan-Neng Li and Zdeněk P. Bažant, EM July 94, p1481-1498.

Performance Evaluation of Crumb-Rubber Modified Asphalt Interlayers, Olga Pendleton and Cindy Estakhri, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p441-448.

Performance of Spun Prestressed Concrete Poles During Hurricane Andrew, Fouad H. Fouad, Norman L. Scott, Elizabeth Calvert and Michael Donovan, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p362-376.

Pipe Uplift Resistance in Frozen Soil and Comparison with Measurements, A. Foriero and B. Ladanyi, CR Sept. 94, p93-111.

Properties of Soundless Chemical Demolition Agents, Jimmie Hinze and James Brown, CO Dec. 94, p816-827.

Rational Limits for Longitudinal Steel in Concrete Columns, ASCE-ACI Committee 441-Concrete Columns, Subcommittee on Longitudinal Reinforcement Limits, (Furlong, Richard W., chmn.), (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p438-443

Repair of a Cracked Cooling Tower Shell Based on Numerical Simulations, Thomas Huemer, Christian Kropik, Herbert A. Mang and Günther Meschke, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p887-

The Slender Tower of 52-54 East End Avenue, Ahmad Rahimian, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1562-1567.

Static Response of Fiberglass Pretensioned Beams, Rajan Sen, Mohsen Issa, Zeying Sun and Mohsen Shahawy, ST Jan. 94, p252-268

Thermal Cycling of Thin and Thick Ply Composites, Stephen S. Tompkins, James Y. Shen and Andre J. Laoie, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p326-335.

Thermal Effects on Massive Concrete Pours, Toorak Zokaie and Timothy A. Osterkamp, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p27-34.

Uniform Lateral Load Capacity of Infilled Frames, Roger D. Flanagan and Richard M. Bennett, (Structures Con-gress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p785-790.

The Use of Type K Expansive Cement Concrete for New Construction and Rehabilitation of Concrete Bridge Decks, Kenneth A. Herr and Robert T. Barclay, (Infrastructure: New Materials and Methods of Repair, Kim

D. Basham, ed., 1994), p955-962.

Automated Crack Identification for Cement Paste, D. Darwln, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p613.

Comparison of Traditional and Neural Classifiers for Pavement-Crack Detection, Mohamed S. Kaseko, Zhen-Ping Lo and Stephen G. Ritchie, TE July/Aug. 94, p552-569.

Crack Depths in Drying Clays Using Fracture Mechanics, Peter H. Morris, James Graham and David J. Williams, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p40-53.

Distress in Prestressed Concrete Roof Girders at a Cement Plant, W. P. S. Dias, A. D. C. Jayanandana, M. C. M. Fonseka and A. A. D. A. J. Perera, CF Feb. 94, p6-15.

Dynamic Stress Intensity Factor for Subsurface Inclined Cracks, Chien-Ching Ma and Szu-Kuzi Chen, EM Mar. 94, p483-498.

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Flexural Analysis of Reinforced Concrete Beams Containing Steel Fibers, Byung Hwan Oh, ST Oct. 92, p2821-

Fracture Analysis of Bolted Timber Connections, Ian Smith and Lin J. Hu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p912-917. Fracture Behavior of Cement Grouted Sand, C. Vipulanan-

Fracture Behavior of Cement Grouted Sand, C. Vipulanandan, A. Ata and S. Mebarkia, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p147-159.

Fracture Mechanics Analysis of Welded Joints Using Boundary/Finite Element Alternating Methods, Ruijia Mu and D. V. Reddy, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1920-1927.

Fracture Mechanics Applied to Geotechnical Engineering, Geotechnical Special Publication No. 43, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994, 0-7844-0056-3, 165pn

Guide for the Design of Prestressed Concrete Poles, William Y. Ford, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p591-596.

and Barry J. Loodno, ed., 1994), p591-596.
Hydraulic Conductivity of Compacted Clay Frozen and Thawed in Situ, Craig H. Benson and Majdi A. Othman, GT Feb. 93, p276-294.

Localization Analysis of Nonlocal Model Based on Crack Interactions, Milan Jirásek and Zdeněk P. Bažant, EM July 94, p1521-1542.

Microsurfacing Urban Pavements, David K. Hein, John J. Emery and Romualdo D'Ippolito, CE May 94, p55-57.

NDE for Steel Bridges: FHWA Research, Past, Present and Future, Steven B. Chase, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1060-1064.

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Rotating Crack Model and Fracture in a R/C Medium, Azadeh Parvin and Theodore G. Toridis, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1944-1950.

Rough Cracks Subjected to Earthquake Loading, Joost Walraven, ST May 94, p1510-1524.

Steel-Concrete Interaction by Means of Film Sensors, Marco di Prisco and Alessandro Gandelli, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p815-820.

Strain Measurement on the Runner of a Hydroelectric Turbine, K. Warren Frizell, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p416-424.

The Structural History of the Jacob Bachmann Tavern, Jack R. Kayser and Kristina Lammi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1570.

Two New Methods of Fictitious-Crack Model and Their Applications, Yuan N. Li, Michael Müller and J.-D. Wörner, EM Dec. 94, p2604-2620.

Cranes

3D CAD Modeling and Graphical Simulation of Mobile Cranes, Parmanand V. Dharwadkar, James T. O'Connor and Thomas M. Gatton, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p539-546.

Automated Post Irradiation Handling of Spent Nuclear Fuel In PNC's FMF-2 Facility Test Hot Cell, Mark H. Price and Thomas R. Frantz, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p358-362.

Automation Raises Lift Planning Out of Manuals, ET June/July 94, p9.

Bechtel Automated Lift Planning System, Craig Bennett and Steve Ditlinger, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p401-409. Dynamic-Behavior Modeler for Material Handling in Construction, Yvan J. Beliveau and Taylan Dal, CP July 94, p269-285.

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SELECTCRANE: An Expert System for Optimum Crane Selection, Awad S. Hanna, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p958-963.

A Stewart Platform Lunar Rover, Roger Bostelman, James Albus, Karl Murphy, Tsung-Ming Tsai and Ed Amatucci, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p175-183.

Creativity

Conceptual Design Using Evolutive-Cognitive Computing Techniques, Donald E. Grierson, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2183-2190.

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Creep and Shrinkage Deflections of RC Beams with Steel

Creep and Shrinkage Deflections of RC Beams with Steel Fibers, Kiang-Hwee Tan, P. Paramasivam and Kah-Chai Tan, MT Nov. 94, p474-494.

Creep Behavior of Structural Timber under Varying Humidity Conditions, Annika Martensson, ST Sept. 94, p2565-2582.

Creep Effects in Composite Beams with Flexible Shear Connectors, Angelo Marcello Tarantino and Luigino Dezi, ST Aug. 92, p2063-2081.

Creep Effects on Static and Cyclic Instability of Granular Soils, Poul V. Lade, GT Feb. 94, p404-419. Creep in Composite Continuous Beams. II: Parametric

Creep in Composite Continuous Beams. II: Parametric Study, Luigino Dezi and Angelo Marcello Tarantino, ST July 93, p2112-2133.

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Early-Age Concrete, René de Borst and A. H. van den Boogaard, EM Dec. 94, p2519-2534. Finite-Element Simulation of Ice-Sheet Indentation, H. A.

Khoo and T. M. Hrudey, EM June 94, p1322-1342. Generalized Creep and Stress Relaxation Model for Clays, Ronaldo I. Borja, GT Nov. 92, p1765-1786.

Long-Term Deflection of RC Beams, W. A. M. Alwis, A. Olorunniwo and K. K. Ang, ST July 94, p2220-2226.

New Perspectives on Soil Creep, Matthew R. Kuhn and James K. Mitchell, GT Mar. 93, p507-524. Performance of Gunite Brow Ditches, Robert W. Day, IR

Sept./Oct. 94, p957-963. Predicting Creep and Shrinkage Effects in Cracked Concrete Elements, A. S. Prasada Rao, R. Jayaraman, V. Vimalanandam and S. Sai Babu, ST Sept. 94, p2784-

Vimalanandam and S. Sai Babu, ST Sept. 94, p2784-2792.

Recent Advances in 3D Non-Linear FE-Analysis of R/C

Recent Advances in 3D Non-Linear Fer-Analysis of Keand P/C Beam Structures, Franz-Josef Ulm, Jean-Luc Clément and Johann Guggenberger, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1427-1432.

Reliability Analysis of Creep and Shrinkage Effects, C. Q. Li and R. E. Melchers, ST Sept. 92, p2323-2337.

Simplified Creep Analysis of Composite Beams with Flexible Connectors, Luigino Dezi, Carlo Ianni and Angelo Marcello Tarantino, ST May 93, p1484-1497.

A Study of Jointless Bridge Behavior, D. Siros and C. Spyrakos, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p485-490. Time-Dependent Behavior of RC Members Strengthened With FRP Laminates, Nikolaos Plevris and Thanasis C. Triantafillou, ST Mar. 94, p1016-1042.

Time-Dependent Load-Distribution Behavior of Parallel-Member Wood Systems, P. Hong, K. J. Fridley and D. V. Rosowsky, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1088-1093.

Creep rupture

Mechanistic Model of the Creep-Rupture Process in Filamentary Composites, Kerry T. Slattery, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p215-222.

Prediction of Cladding Life in Waste Package Environ-ments, J. Kevin McCoy and Thomas W. Doering, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p565-572.

Creosote

Eagle Harbor Superfund Project, Eric E. Nelson, Amy L Venderheiden and A. David Schuldt, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1122-1131.

Underwater Cleanup of a Pool of Liquid Creosote, B. G. Bennett and I. K. Hill, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p961-970.

A General Theory of Channel Adjustment in High Gradi-ent Streams, Gordon E. Grant, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p817-818.

Stability Principle of Critical Flow Depth in a Moving Coordinate System, Cheng-lung Chen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1263.

Critical load

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Critical Loads and Development of Acid Rain Control Op-tions, Hugh Ellis and Michael L. Bowman, EE Mar./Apr. 94, p273-290.

Critical path method

CPM/LOB: New Methodology to Integrate CPM and Line of Balance, Saad A. Suhail and Richard H. Neale, CO Sept. 94, p667-684.

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Crop response

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Crop yield

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Irrigation Timing for Wheat Based on Climate, Crop, and Soil Data, R. P. Tripathi, IR May/June 92, p370-381.

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Cross sections

Assessment and Recommendations for the Enhancement of the Bardawil Lagoon Outlets, Alfy M. Fanos, Ahmed A. Khafayg, Mohamed N. Anwar and Mary G. Naffaa, (*Coastal Dynamics '94*, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p189-

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Flow-Measurement Structures of Compound Cross Section for Rivers, Mustafa Gögüs and Dogan Altınbilek, IR Jan./Feb. 94, p110-127

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Rotational Centers of Plates Regulating Distortion of Box Girders, Tsuneo Usuki, ST Sept. 94, p2602-2622.

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Stable Reinforced-Concrete Section-Analysis Procedure, C. R. Thewalt and B. Stojadinović, ST Oct. 94, p3012-

3024.

Stress and Strain in Curved Noncracked Concrete Members, Makoto Kawakami and Amin Ghali, ST Feb. 94, p527-537.

Width and Depth-Constrained Best Trapezoidal Section, David C. Froehlich, IR July/Aug. 94, p828-835.

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Parametric Evaluation of Cross-Flow Turbine Performance, V. R. Desai and N. M. Aziz, EY Apr. 94, p17-34.

Refinement of Cross-Flow Turbine Design Parameters, Hara G. S. Totapally and Nadim M. Aziz, EY Dec. 94, p133-147.

Crude oil

Houdini: In-Tank Mobile Cleanup Robot, Hagen Schempf, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p286-295.

The Impact of the Doe Decision Making Process at the Waste Isolation Pilot Plant with Respect to Petroleum Waste Isolation Pilot Plant with Respect to Petroleum Reserves, Matthew Silva, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1753-1761.

Crushing

One-Dimensional High-Pressure Compression of Granular Media, M. M. Hagerty, D. R. Hite, C. R. Ullrich and D. J. Hagerty, GT Jan. 93, p1-18.

Crystal growth

In Situ Photothermal Deflection Spectroscopy of Uranium Dioxide Dissolution, James D. Rudnicki, Richard E. Russo and David W. Shoesmith, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2609-2615.

Stability Analysis of Rayleigh-Benard Convection in the Presence of Side Walls, P. Diplas and C. Dietz, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p82-86.

Culverts

Behavior of Deeply Corrugated Steel Plate in Culvert, Alan F. Rauch, Shad M. Sargand and Glenn A. Hazen, ST May 94, p1651-1655.

de St-Venant Channel Routing in Distributed Watershed Modeling, Fred L. Ogden, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p492-496.

Drop Height Influence on Outlet Scour, Frederick K. Doehring and Steven R. Abt, HY Dec. 94, p1470-1476.

Emerging Technologies for Short-Span Bridge Solutions, M. Zoghi, D. A. Tomley and M. P. Henderson, (Infra-structure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1163-1170.

HEC River Analysis System (HEC-RAS), Vernon Bonner, Gary Brunner and Mark Jensen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p376-380.

Improved Hydraulic Features of the HEC River Analysis (HEC-RAS), Gary W. Brunner and Steven S. Piper, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p502-506.

Jury Verdict: Frequency versus Risk-Based Culvert De-sign, Gary L. Lewis, WR Mar./Apr. 92, p166-184. Local Scour Potential for Large Bed Material with Shallow Tailwater Depth, Kwang-Ik Son and Gilberto E. Urroz,

Hallwater Depth, Rwangi-t, Son and officient E. Uroteneo, ed. and Ralph R. Rumer, ed., 1994), p1146-1150. Riprap Criteria below Pipe Outlet, Mahmood Shafai-Bajestan and Maurice L. Albertson, HY Feb. 93, p181-

Three-Dimensional Analysis of Flexible Circular Culverts, Ian D. Moore and Richard W. Brachman, GT Oct. 94, p1829-1844.

Curing

Delayed Ettringite Formation, H. F. W. Taylor, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p122-131.

Influence of Specimen Size on Effect of Curing Regime on Concrete Compressive Strength, I. Soroka and H. Baum,

MT Feb. 94, p15-22.

Optimization of Curing of Silica Fume Concrete, Mohammad Shamim Khan and Michael E. Ayers, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p820-827.

3-Dimensional Processes Along Sandy Beaches - Dimensions of a Coastal Facility, Ida Brøker, Hakeem Johnson, Frik Asp Hansen, Ann Skou, Peter Justesen and Rolf Deigaard, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p103-113.

Acoustic-Doppler Velocimeter (ADV) for Laboratory Use, Atle Lohrmann, Ramon Cabrera and Nicholas C. Kraus, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed.,

1994), p351-365.

Advances in 3D Modelling of Wave-Driven Currents, Philippe Péchon, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed.,

1994), p366-375.

Comparison of Current Meters Used for Stream Gaging Janice M. Fulford, Kirk G. Thibodeaux and William R. Kaehrle, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p376-385.

A Computerized Open Channel Flow Measurement Device, Stan E. Malinky, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation,

Clifford A. Pugh, ed., 1994), p27-36.

The December 1992 Storm at the New York Mud Dump Site, Scott McDowell, Brian May and Douglas Pabst, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p786-

Depositional Turbidity Currents Laden with Poorly Sorted Sediment, Marcelo H. Garcia, HY Nov. 94, p1240-1263.

Design and Execution of Hydrodynamic Field Data Collection using Acoustic Doppler Current Profiling Equipment, Timothy L. Fagerburg and Thad C. Pratt, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p530-538

DREDGMAP: A PC Based System to Predict the Fate of Dredged Material, J. Craig Swanson, Malcolm L. Spaulding and Tatsusaburo Isaji, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p200-209.

Effects of Simulated Ice on the Performance of Price Type-AA Current Meter Rotors, Janice M. Fulford, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p251-258.

Equilibrium-Range Spectrum of Waves Propagating on Currents, Kyung Duck Suh, Yoo-Yin Kim and Dong Young Lee, WW Sept./Oct. 94, p434-450.

Estimation of Mean Velocity for Flow Under Ice Cover, Martin J. Teal and Robert Ettema, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p242-250.

Experimental Study of Monochromatic Wave-Ebb Current Interaction, Michael J. Briggs and Philip L. -F. Liu, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p474-

Field Measurements of Secondary Currents in Straight Rivers, Iehisa Nezu, Akihiro Tominaga and Hiroji Naka-gawa, HY May 93, p598-614.

Forces on Vibrating Cylinder Near Wall in Current and Waves, B. M. Sumer, J. Fredsøe, B. L. Jensen and N. Christiansen, WW May/June 94, p233-250.

The Generation and Use of Site Specific Wave and Current Databases for Dredged Material Fate Predictions, Norman W. Scheffner, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p190-199.

Numerical Model of the Longshore Current on a Barred Beach, Jane McKee Smith, Magnus Larson and Nicholas C. Kraus, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994),

Propagation of Linear Gravity Waves Over Slowly Vary-ing Depth and Currents, Francisco J. Rivero and Agustín S.-Arcilla, (Ocean Wave Measurement and Analysis, Or-ville T. Magoon, ed. and J. Michael Hemsley, ed., 1994),

Recent Applications of Acoustic Doppler Current Profilers, K. A. Oberg and David S. Mueller, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p341-350.

Sediment Transport Measurements in Combined Wave-Current Flows, I. Katopodi, J. S. Ribberink, P. Ruol and C. Lodahl, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p837-851.

Sediment Transport Under Wave-Current Interaction on Macro-Tidal Beaches, Franck Levoy, Olivier Monfort and Hélène Rousset, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C.

Kraus, ed., 1994), p727-741.

Sensitivity of Great Lakes Forecasting System Nowcasts to Meteorological Fields and Model Parameters, William P. O'Connor and David J. Schwab, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p149-157.

Shingle Movement Under Waves & Currents: An Instru-mented Platform for Field Data Collection, George Voulgaris, Michael P. Wilkin and Michael Collins, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p894-

Theoretically-Derived Regime River Width, Pierre Y. Julien, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p949-953.

Theory and Observation of Currents and Setup Over a Shallow Reef, Graham Symonds, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p1-13.

The Time Dependent Ray Method for Calculation of Wave Transformation on Water of Varying Depth and Current, Yung Y. Chao, (Ocean Wave Measurement and Analy-sis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p671-679.

Undertow at SUPERTANK, Jane McKee Smith, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p220-232.

Velocity Moments on a Macro-Tidal Intermediate Beach, Yolanda L. M. Foote and David A. Huntley, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p794-808.

Waves Propagating on an Adverse Jet, Fredric Raichlen, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p657Curricula

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Context for Writing in Engineering Curriculum, Matthew R. Kuhn and Karen Vaught-Alexander, El Oct. 94, p392-400.

A Critically Educated Public Explores High Level Radio-active Waste Management, Jane E. Blum, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p224-231

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High-Level Radioactive Waste Curriculum Usage, Evaluation, and Customer Focus, Ginger P. King, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p104-111.

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A Multimedia Learning Environment for Statics, Siegfried M. Holzer and Raul H. Andruet, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p308-314.

National Survey of Materials Engineering Program, K. P. George, John R. Rohde and Srinivasa L. Iyer, El July 94, p313-323.

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Transportation Capstone Design Project: Review and Future Directions, John G. Schoon, El Jan. 94, p70-89.

Curtain walls

Critique of Commercial Structures, Herbert S. Saffir, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p472-475.

Hurricane Andrew - The Ultimate Curtain Wall Test, James Hayes Larkin, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), 0424-429.
Testing of Concrete Curtain Wall Panels Reinforced with

FRP Grids, Edwin R. Schmeckpeper, Richard Nielsen and Charles H. Goodspeed, (*Structures Congress XII*, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1250-

Curvature

Amplified Microbending in Coated Optical Fibres, John Roorda, EM Apr. 94, p917-921.

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Strengths and Weaknesses of Shallow Water Equations in Steep Open Channel Flow, R. C. Berger, (Hydraulic En-gineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1257-1262. Stress and Strain in Curved Noncracked Concrete Mem-

bers, Makoto Kawakami and Amin Ghali, ST Feb. 94, p527-537.

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Finite Element Analysis of Thin-Walled Curved Beams Made of Composites, G. S. Palani and Sundaramoorthy Rajasekaran, ST Aug. 92, p2039-2062. Nonlinear Finite Deformation Analysis of Beams and Col-

umns, Ronald Y. S. Pak and Eric J. Stauffer, EM Oct. 94. p2136-2153.

Rigid Beam-To-Column Connection Detail for Circular Composite Columns, Atorod Azizinamini and Y. Shekar, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1155-1160. Thin-Walled Curved Beams. I: Formulation of Nonlinear

Equations, Young J. Kang and Chai H. Yoo, EM Oct. 94, p2072-2101.

Thin-Walled Curved Beams. II: Analytical Solutions for Buckling of Arches, Young J. Kang and Chai H. Yoo, EM Oct. 94, p2102-2125.

Curved profiles

Horizontally Curved Steel Bridge Research-Update 2, S. R. Duwadi, J. M. Yadlosky and C. H. Yoo, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1071-1076.

Cutoff walls

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The Miller City Levee Break and Incipient Meander Cutoff, K. A. Oberg and R. B. Jacobson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p623-627.

Three-Dimensional Behaviour of a Multiple Bar System, Kathelijne M. Wijnberg and Felix C. J. Wolf, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p59-73.

Cyclic loads

The Control of Settlement Using Geogrids, Gunther E. Bauer, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p491-501.

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Cyclical Behavior of Welded Steel Shear Studs, Kurt Mi-chael McMullin and Abolhassan Astaneh-Asl, (Struc-tures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1024-1029.

Deformations in Granular Soils Due to Cyclic Loading, P. M. Byrne and J. McIntyre, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1864-1896.

Ductility of Concrete-Filled Steel Box Columns under C clic Loading, Ts 94, p2021-2040. Tsutomu Usami and Hanbin Ge, ST July

Effects of Cyclic Lateral Loads on Piles in Sand, J. H. Long and Gheert Vanneste, GT Jan. 94, p225-244.

Experimental Study of Thin Steel-Plate Shear Walls under Cyclic Load, Vincent Caccese, Mohamed Elgaaly and

Ruobo Chen, ST Feb. 93, p573-587

Fatigue Cracking and Rutting in Flexible Pavements, D. V. Ramsamooj, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p132-146.

Fatigue of Prestressed Concrete Beams with Inclined Strands, John F. Muller and Peter F. Dux, ST Apr. 94,

p1122-1139.

Gravelly Soil Properties Evaluation by Large Scale In-Situ Cyclic Shear Tests, Takaaki Konno, Munenori Hatanaka, Kenji Ishihara, Yukimi Ibe and Setsuo lizuka, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p177-200.

Ground Failures Under Seismic Conditions, Geotechnical Special Publication No. 44, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994, 0-7844-0055-5, 260pp. Inelastic Link Element for EBF Seismic Analysis, James M.

Ricles and Egor P. Popov, ST Feb. 94, p441-463. Lateral Cyclic Response of Pile in Viscoelastic Winkler

Subgrade, Shintaro Yao and Toyoaki Nogami, EM Apr. 94, p758-775.

Liquefaction Characteristics of Silts, Sukhmander Singh, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p105-116.

Multiaxial Cyclic Plasticity Model for Clays, Ronaldo I. Borja and Alexander P. Amies, GT June 94, p1051-1070.

Nonlinear Analysis of Prestressed Concrete Structures, Mohd-Hisham Mohd-Yassin and Filip C. Filippou, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1421-1426.

Numerical Simulations of Monotonic and Cyclic Loading of Granular Soil, Tang-Tat Ng and Ricardo Dobry, GT

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Postbuckling Behavior of Steel-Plate Shear Walls under Cyclic Loads, M. Elgaaly, V. Caccese and C. Du, ST Feb. 93, p588-605.

Postcyclic Undrained Strength for Cohesive Soils, Kazuya Yasuhara, GT Nov. 94, p1961-1979.

Procedures for Elastoplastic Liquefaction Modeling of Sands, A. Anandarajah, EM July 94, p1563-1587.

RC Beam-Column Element for Nonlinear Frame Analysis, Enrico Spacone and Filip C. Filippou, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p155-164.

Resilient Moduli of Granular Materials, Musharraf Zama Dar-Hao Chen and Joakim Laguros, TE Nov./Dec. 94,

Rheological Characterization of Asphaltic Mixtures Under Repetitive Loading, Y. R. Kim and Y. C. Lee, (Infra-structure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p796-803.

Rough Cracks Subjected to Earthquake Loading, Joost Walraven, ST May 94, p1510-1524.

Seismic Behavior of Open-Web Truss-Moment Frames, Subhash C. Goel and Ahmad M. Itani, ST June 94, p1763-1780.

Settlement of a Silo Subjected to Cyclic Loading, Marco Favaretti and Alberto Mazzucato, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p775-

Shakedown Analysis of Hollow Spheres, Wei Jiang, EM July 94, p1447-1480.

Study of Two-Surface Plasticity Theory, Wei Jiang, EM Oct. 94, p2179-2200.

Cyclic strength

Cyclic Behavior of Gravelly Soil, Mark D. Evans and Shengping Zhou, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p158-176.

Cyclic Behavior of Partially Saturated Collapsible Soils Subjected to Water Permeation, Kenji Ishihara and Kenji Harada, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p34-50.

Cyclic Performance of Riveted Connections, Roberto Leon, Gabriel P. Forcier, Charles W. Roeder and F. Robert Preece, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1490-1495.

Gas in Soils II: Effect of Gas on Undrained Static and Cyclic Strength of Sand, Nader S. Rad, Antonio J. D. Vianna and Toralv Berre, GT Apr. 94, p716-736.

The Influence of Fines Type and Content on Cyclic Strength, Joseph Patrick Koester, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p17-33.

Cyclic Behavior of Joints Between Steel Beams and Reinforced Concrete Columns, Ryoichi Kanno and Gregory G. Deierlein, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1137-1142

Cyclic Testing of Pultruded Fiber-Reinforced Plastic Beam-Column Rigid Connection, Michel Bruneau and David Walker, ST Sept. 94, p2637-2652.

Gravelly Soil Properties Evaluation by Large Scale In-Situ Cyclic Shear Tests, Takaaki Konno, Munenori Hatana ka, Kenji Ishihara, Yukimi Ibe and Setsuo Iizuka, (Ground Failures Under Seismic Conditions, Shamsher

Prakash, ed. and Panos Dakoulas, ed., 1994), p177-200. Liquefaction of Artificially Filled Silty Sands, Susumu Yasuda, Kazue Wakamatsu and Hideo Nagase, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p91-104.

Low-Cycle Fatigue Behavior of Reinforcing Steel, J. B. Mander, F. D. Panthaki and A. Kasalanati, MT Nov. 94, p453-468.

Optimum Number of Specimens for Low-Cycle Fatigue Tests of Concrete, Todorka Paskova and Christian Meyer, ST July 94, p2242-2247.

Variables Affecting Cyclic Behavior of Reinforcing Steel, J. I. Restrepo-Posada, L. L. Dodd, R. Park and N. Cooke, ST Nov. 94, p3178-3196.

Cyclone separators

Coordinating the Feasibility of a Dredged Material Separation System Using Hydrocyclones for the Maintenance Dredging Operation at Canaveral Harbor, Florida, Deborah R. Heibel, Mitch A. Granat and Mark Wolff, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p38-47.

US Hurricanes of 1992 an Australian Perspective, Greg Reardon and Doug Meecham, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p642-651.

Analytical Solution for Bending of Coaxial Orthotropic Cylinders, Claude Jolicoeur and Alain Cardou, EM Dec. 94, p2556-2574.

Cone-Cylinder Intersection under Pressure: Axisyn Failure, Jin-Guang Teng, EM Sept. 94, p1896-1912.

Convergence Rates of the Method of Successive Elastic Solutions in Thermoplastic Problems of a Layered Concentric Cylinder, Todd O. Williams and Marek-Jerzy Pindera, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p348-357.

Cross-Flow Vibrations of Cylinder in Irregular Oscillatory Flow, Andrzej Kozakiewicz, B. Mutlu Sumer and Jørgen

Fredsøe, WW Nov./Dec. 94, p515-534.

Forces on Vibrating Cylinder Near Wall in Current and Waves, B. M. Sumer, J. Fredsøe, B. L. Jensen and N. Christiansen, WW May/June 94, p233-250.

The Performance and Behaviour of Biological Filter Walls as Affected by Cyclical Temperature Changes, George L. England, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p57-76.

Snap Buckling of a Delaminated Layer in a Composite Cylinder, Wan-Lee Yin, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p156-165.

Thermoplastic Stabilization of MSW Combustor Ash, Vincent T. Breslin and Shawn E. Tisdell, EE Jan./Feb. 94, p154-168.

Cylindrical shells

Buckle Propagation: Steady-State Finite-Element Analysis, André C. Nogueira and John L. Tassoulas, EM Sept. 94, p1931-1944.

Comparison of Donnell and Higher Order Nonlinear Models for Dynamically Loaded Composite Plates and Shells, Arthur E. Forral and Anthony N. Palazotto, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p99-108.

Efficient Nonlinear Analysis of Column-Supported Cylinderical Shells, P. L. Gould, R. V. Ravichandran and S. Sridharan, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina

U. Penalba, ed., 1994), p927-935. Elasto-Plastic Buckling Design for Shallow Cylindrical Shells under External Pressure, Seishi Yamada and James G. A. Croll, (Spatial, Lattice and Tension Struc-tures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p936-945.

Free Vibrations of Laminated Anisotropic Cylindrical Shells, P. R. Heyliger and A. Jilani, EM May 93,

p1062-1077.

Nonlinear Analysis of Stiffened Laminated Cylindrical Shells Using the Layerwise Theory of Reddy, M. Savoia and J. N. Reddy, (Engineering, Construction, and Oper-ations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p127-136.

Plastic Collapse at Lap Joints in Pressurized Cylinders under Axial Load, Jin-Guang Teng, ST Jan. 94, p23-45.

Thermoelastic Theory of Cylindrical Sandwich Shells with Piezoelectric Sensors or Actuators, Victor Birman, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p80-88.

Three-Dimensional Solutions for Thermomechanical Stresses in Sandwich Panels and Shells, W. Scott Burton and Ahmed K. Noor, EM Oct. 94, p2044-2071.

Natural and Dam Break Flood Routing in Mountain Rivers, Enan F. Jayyousi, David S. Bowles and Roland W. Jeppson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p371-375

New Methods for Modelling Dam-Break Wave, A. Pa-quier, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed.,

1994), p229-240.

Object-Oriented Finite Volume Dam-Break Model, Bochra Ech-Cherif El Kettani and Driss Ouazar, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p186-196.

Dam construction

Optimizing River Diversion under Hydraulic and Hydrologic Uncertainties, Abbas Afshar, Ahmad Barkhordary and Miguel A. Mariño, WR Jan./Feb. 94, p36-47.

Performance of Nanhua Dam During Construction, Hsien-Chang Kao and Jin-ching Chern, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p417-

Start-ups, CE May 94, p8.

Dam design

Local Scour Potential for Large Bed Material with Shallow Tailwater Depth, Kwang-lk Son and Gilberto E. Urroz, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1146-1150.

Detecting Dam Failures, C. Michael Knarr, Thomas J. Barker and Stephen F. McKenery, CE June 94, p66-67.

Free surface flow modelling on a complex topography, Mohamed Naaim and Gerard Brugnot, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p298-308.

Plain flooding: near field and far field simulations, G. Braschi, F. Dadone and M. Gallati, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p45-59.

Two-Dimensional Dam-Break Flow Simulation in a Sudden Enlargement, M. Četina and R. Rajar, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p268-282.

Dam safety

Alternatives for Overtopping Protection of Dams, Task Committee on Overtopping Protection of the Hydraulics Division of the American Society of Civil Engineers, (Noel R.(Randy) Oswalt, chmn.), 1994, 0-7844-0004-0, 140pp.

Dam Safety Issues Related to Urban Detention Ponds, James E. Alverson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry

N. Tuvel, ed., 1994), p714-717.

DSM Saves the Dam, Andrew D. Walker, CE Dec. 94, p48-51.

Natural and Dam Break Flood Routing in Mountain Rivers, Enan F. Jayyousi, David S. Bowles and Roland W. Jeppson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p371-

Round Rock Dam, Outlet Works Modification, Bruce D. Feinberg, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p411-423.

Potential for Seepage Erosion of Landslide Dam, William Meyer, R. L. Schuster and M. A. Sabol, GT July 94, p1211-1229.

Damage

Beliefs about Hurricane Andrew, Construction, and Evacuation, Earl J. Baker, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p31-36.

Benefits of Hazard Mitigation Planning to Reduce Shore-line Impacts Due to Great Lakes Water Level Management Fluctuations and Severe Storms, Robert Nairn and Darryl Hatheway, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p182-186.

Breakwater Armor Damage due to Wave Groups, Josep R. Medina, Robert T. Hudspeth and Claudio Fassardi, WW

Mar./Apr. 94, p179-198.

California Housing Damage Related to Expansive Soils, Richard L. Meehan and Lawrence B. Karp, CF May 94, p139-157.

Catastrophic Hurricanes May Become Frequent Events in Caribbean and Along the United States East and Gulf Coasts, Robert C. Sheets, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p37-51.

Causes of Roof Covering Damage and Failure Modes: In-Causes of Roof Covering Damage and Failure Modes: Insights Provided by Hurricane Andrew, Thomas Lee Smith, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p303–312.
Checking Concrete Growth, Vann A. Newell, David T.

Tanner and Charles D. Wagner, CE Jan. 94, p70-72

Coastal and Oceanographic Impact of Hurricane Andrew, oastal and Oceanographic impact of righteen Analow, Hsiang Wang and Lihwa Lin, (Hurricanes of 1992: Les-sons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p791-798.

Critique - Manufactured Housing Session, Frank Walter, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad So-

tani, ed., 1994), p203-212.

Cumulative Impact of Heavy Permit-Trucks on Steel Bridges, Michel Bruneau and Murat Dicleli, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p97-102.

Damage Detection in Structures Based on Feature-Sensitive Neural Networks, Z. Peter Szewczyk and Prabhat Hajela, CP Apr. 94, p163-178.

Damage Tolerance Analysis in Structural Rehabilitation, Charles J. Hookham, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p94-103.

Damage Tolerance of Thin Composite Reinforced Membrane Structures, Levon Minnetyan, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p296-305.

Demonstrated Success in Reducing Risk of Losses in a Severe Hurricane: Hurricane Omar Experience, Juan C. Tenorio and Jack B. Jones, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p716-725.

Design and Construction Deficiencies and Building Code Adherence, Mohammed S. Khan and Wimal Suaris, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad So-

tani, ed., 1994), p133-146.
Disaster Debris Management and Diversion from Hurricane Iniki, Wayne Rifer, Brenda Osterhaug and Dale Burton, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p548-557.

Economic Risk Analysis of Building Codes, James D. En-glehardt, Chengjun Peng and Ahmad Namini, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p674-683.

Effects of Hurricanes Andrew and Iniki on Lifelines, Masoud M. Zadeh, Tom Larsen, Charles Scawthorn, Craig Van Anne and Tom K. Chan, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994),

p223-232.

Erosion Hazards and Coastal Construction Deficiencies Observed on Kauai After Hurricane Iniki, A. Todd Davison, Charles E. Bornman and Melvin Nishihara, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad So-

tani, ed., 1994), p736-745.

Estimation of V_{bnus}, and Identification of the Iniki Overwash Line on Kaua'i, C. H. Fletcher, T. A. Schroeder, G. M. Barnes, B. M. Richmond and M. A. Hampton, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p746-755.

Evaluation of Corroded Steel Chimneys, Tadeusz Nawrot and Andrzej S. Nowak, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p349-354.

Excavation Damage and Organic Growth in a 1.2m Diame ter Borehole, R. A. Everitt, D. A. Brown, D.M. Boychuk and P. Gann, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2092-2100.

Failure of Residential Building Envelopes as a Result of Hurricane Andrew in Dade County, Florida, Clifford Oliver and Chris Hanson, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p396-508.

Failure of the Turkey Point Unit 1 Reinforced Concrete Chimney During Hurricane Andrew, W. F. Brannen, T. D. Joseph, Randolph W. Snook and Robert A. Porthouse, (Hurricanes of 1992: Lessons Learned and Impli-cations for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p405-414.

Fatigue Damage Accumulation Under Stochastic Stress Histories, Shahram Sarkani, Naser K. Buresli and George Michaelov, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p839-844.

Grout Repair of Dented Offshore Tubular Bracing-Experimental Behavior, James M. Ricles, Troy E. Gillum and William Lamport, ST July 94, p2086-2107.

Hurricane Andrew Induced Damage to Florida Power & Light's Transmission System, C. Jerry Wong, (Hurri-canes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p387-396.

Impact of Hurricane Andrew on Electrical Generating Fa-cilities, W. F. Brannen, R. L. Adams and J. E. Sheetz, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad So-

tani, ed., 1994), p397-404.

The Importance of Hurricane Risk Assessment in Housing and Improved Design and Building Practice Therein, Desmond Imbert, Patrick Drakes and David Prevatt, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p684-695.

Improvements to Residential Construction on Kauai After Iniki, Ken K. Hayashida and Dennis K. Hanatani, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p617-625.

The Inelastic Response of an Offshore Platform in Hurricane Andrew, Gary R. Imm, Patrick E. O'Connor and James M. Light, (Structures Congress XII, N. C. Baker,

ed. and Barry J. Loodno, ed., 1994), p7-12.

Knowledge-Based System for Wind Damage to Buildings, Kishor C. Mehta, Douglas A. Smith and Ronald H. Cheshire, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p726-735.

Late Stage Damage in G30-500/PMR-15 Laminates, Wieslaw K. Binienda, Anping Hong, Andrew Gyekenyesi and John Hemann, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed.

and Stanley Lokaj, ed., 1994), p316-325.

The LEO Particulate Environment as Determined by LDEF, Thomas H. See, Michael E. Zolensky, Friedrich Hörz, Ronald P. Bernhard, Kimberly S. Leago, Jack L. Warren, Clyde A. Sapp, Tammy R. Foster and William H. Kinard, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p618-627.

Life After Andrew on Florida's Turnpike, Massoud Moradi, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad

Sotani, ed., 1994), p558-566.

Load Duration Effects in an 85-Year-Old Timber Structure, J. B. Mitchell, K. J. Fridley, M. O. Hunt and J. F. Senft, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p73-78.

Localization Analysis of Nonlocal Model Based on Crack Interactions, Milan Jirásek and Zdeněk P. Bažant, EM

July 94, p1521-1542.

The Manufactured Home Dilemma, James R. McDonald, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p195-202.

Measurement and Hindcast of Hurricane Iniki Coastal Inundation, Steven Yamamoto, Scott Sullivan and Eiji Nakazaki, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p756-771.

Mechanical Behavior of Dowels Embedded in Concrete, Luigi Biolzi and Natalino Gattesco, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p630-635.

Modeling Fracture in Cemented Granular Materials, B. C. Trent and L. G. Margolin, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p54-69.

One Engineer's Wish List for Hurricane Hazard Mitiga-tion, Ronald F. Zollo, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p268-277.

Optimum Number of Specimens for Low-Cycle Fatigue Tests of Concrete, Todorka Paskova and Christian Meyer, ST July 94, p2242-2247.

Overview of Hurricane Andrew in South Florida, Ronald A. Cook, (Hurricanes of 1992: Lessons Learned and Im-plications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p70-83.

Overview of Hurricane Iniki, Arthur N. L. Chiu, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p92-101.

Overview of Space Environmental Effects, Alan J. Watts, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p628-637.

An Overview of the Federal Response to Hurricane Iniki, Frank R. Finch, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p294-299.

Performance of Commercial Masonry Structures in Hurri-cane Andrew, Geoffrey W. Blaney, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p456-464.

Performance of Manufactured Housing in Louisiana During Hurricane Andrew, Marc L. Levitan, Leighton S. Cochran and Janet E. Levitan, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p166-175.

Performance of Offshore Platforms in Hurricane Andrew, Ahsan Kareem and Charles E. Smith, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994),

Performance of Plywood and OSB Sheathing During Hurricanes Andrew and Iniki, Edward L. Keith, (Hurricanes of 1992: Lessons Learned and Implications for the Fu-ture, Ronald A. Cook, ed. and Mehrdad Sotani, ed.,

1994), p313-329.

Performance of Traffic Signals and Signs in Hurricane Andrew, Frances K. Ashley, Ronald A. Cook and Marc I. Hoit, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p415-423.

Probabilistic Nonlocal Damage Model for Continua with Random Field Properties, J. Carmeliet and H. Hens, EM Oct. 94, p2013-2027. Protecção Provisória do Molhe Oeste do Porto de Sines,

Fausto Gonçalves Henriques and Ismael Byscaia de Carvalho, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of

the waterway, Port, Coastal, and Ocean Division or ASCE, 1994), p35-53. Rate Dependent Plasticity and Damage for Concrete, V. P. Panoskaltsis, J. Lubliner and P. J. M. Monteiro, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p27-

Role of Vortex-Excited Vibrations in Damage to Power Poles in Hurricane Andrew, Richard A. Skop and Ahmad H. Namini, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p567-576.

Seismic Hazard Analysis of Nonlinear Structures. I: Methodology, Paolo Bazzurro and C. Allin Cornell, ST Nov. 94, p3320-3344.

Shelters for Hurricane Refuge, Herbert S. Saffir, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed.,

1994), p241-248.

Short Synthesis of Some Studies Carried Out for the Repairing of Sines Port West Breakwater, G. Paolella and S. Corsini, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p70-98.

Some Lessons from Australian Experience, George R. Walker, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and

Mehrdad Sotani, ed., 1994), p249-258.

Statistically-Based Evaluation of Homes Damaged by Hurricanes Andrew and Iniki, Jay H. Crandell, Mark T. Gibson, Edward M. Laatsch, Mark S. Nowak and J. Albert vanOvereem, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p519-528.

Structural Damage Identification from Dynamic-Test Data, Juan R. Casas and Angel C. Aparicio, ST Aug. 94, p2437-2450.

Study: Thin Steel Edges Thick Wood, CE Nov. 94, p8 A Survey of Building Performance in Hurricane Iniki and Typhoon Omar, James W. Sheffield, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p446-455.

Temporary Protection of the West Breakwater of the Port of Sines, Fausto Goncalves Henriques and Ismael Byscaia de Carvalho, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p54-69. Thermal Cycling of Thin and Thick Ply Composites, Stephen S. Tompkins, James Y. Shen and Andre J. La-voie, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p326-335.

Uplift Resistance of Plywood and OSB Roof Sheathing, S. D. Shiff, D. P. Mizzell and M. D. Zaitz, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p1054-1059.

US Hurricanes of 1992 an Australian Perspective, Greg Reardon and Doug Meecham, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p642-651.

West Breakwater Maintenance, H. Ligteringen and Fernando A. S. Oliveira, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p428-439.

Wind Resistance of Conventional Light-Frame Buildings, Ronald W. Wolfe, Ramon M. Riba and Mike Triche, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p652-662.

Damage accumulation

Accurate and Rapid Determination of Fatigue Damage in Steel Bridges, C. Hahin, J. M. South, J. Mohammadi and R. K. Polepeddi, ST Jan. 93, p150-168.

Fatigue Crack Growth Rate of Metal by Plastic Energy Damage Accumulation Theory, Wei Wang and Cheng-Tzu Thomas Hsu, EM Apr. 94, p776-795.

1988 Armenia Earthquake. II: Damage Statistics Versus Geologic and Soil Profiles, M. K. Yegian, V. G. Ghahraman and G. Gazetas, GT Jan. 94, p21-45.

Application of Field Data to Serviceability and Life Prediction of Highway Bridges, Jamshid Mohammadi, Sidney A. Guralnick and Ramakrishna Polepeddi, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1089-1096.

Application of Neural Networks in Vibrational Signature Analysis, M. F. Elkordy, K. C. Chang and G. C. Lee, EM

Feb. 94, p250-265.

Assessing Fitness for Purpose of Offshore Platforms. I: An-alytical Methods and Inspections, H. Banon, R. G. Bea, F. J. Bruen, C. A. Cornell, W. F. Krieger and D. A. Stewart, ST Dec. 94, p3595-3612.

Assessment of Building Damage Sustained During Hurricane Iniki (Comparison with Hurricane Iwa), Michael K. H. Yee and Arthur N. L. Chiu, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p102-110.

Bridge Condition Rating Using Fuzzy Sets and an Eigen-Aturaliya, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1908-1915.

Building KBES for Diagnosing PC Pile with Artificial Neural Network, Yi-Cherng Yeh, Yau-Hwaug Kuo and Deh-Shiu Hsu, CP Jan. 93, p71-93.

Computer Modelling of Comminuting Granular Media, H. Alehossein and H.-B. Mühlhaus, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p660-667.

Condition Assessment of Highway Bridges, Taner Alsel, Kuo-Liang Lee and Emin A. Aktan, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1900). 1994), p1124-1130.

Damage to Engineered Structures at Homestead AFB, Maurice R. Harlan, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p213-222

Debate Continues Over Steel-Weld Performance, CE Aug. 94, p17.

Flood Loss Assessment with Integrated Measures, Yacov Y. Haimes, Duan Li, Vijay Tulsiani, Eugene Z. Stakhiv and David Moser, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p219-233.

Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994, 0-7844-0046-6, 808pp.

Methodology for Forensic Investigations of Seismic Dan age, Duane Castaneda and Colin Brown, ST Dec. 94,

p3506-3524.

Natural and Dam Break Flood Routing in Mountain Rivers, Enan F. Jayyousi, David S. Bowles and Roland W. Jeppson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p371-

Planning and Implementing a Management System for Utility Cuts in City Streets, Rajagopal S. Arudi, Prahlad D. Pant, Andrew Bodocsi and Ahmet E. Aktan, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p764-771.

Quantifying Flood Damage Uncertainty, David A. Moser, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene

L. Stakhiv, ed., 1994), p201-218.

Relationship Between Residential Insurance Losses and Wind Conditions in Hurricane Andrew, Peter R. Sparks and Shiraj A. Bhinderwala, (Hurricanes of 1992: sons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p111-124.

Repair of Abrasion/Erosion Damage to Vallecito Dam with Silica Fume Concrete, Stan Mattingly and Glenn Smoak, (Infrastructure: New Materials and Methods of Repair,

Kim D. Basham, ed., 1994), p735-742.

The Role of SEAOH in the Post-Iniki Rebuilding and Recovery Effort, Howard K. C. Lau and Michael K. H. Yee, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p278-283.

Sensitivity-Based Weighted-Average in Structural Damage Assessment, P. C. Pandey and S. V. Barai, CF Nov. 94,

p243-263.

- A Statistical Analysis of Wind Damage to Single-Family Dwellings Due to Hurricane Hugo, Serji Amirkhanian, Peter Sparks and Sandy Watford, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1042-1047.
- Structural Assessment of Bomb Damage for World Trade Center, Ennala Ramabhushanam and Marjorie Lynch, CF Nov. 94, p229-242.
- Structural Failure and Quality Assurance of Space Frames, Tien T. Lan, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p123-132.

Study Takes Stock of Metal Building, CE Aug. 94, p8.

Using GIS Technology to Assess Hurricane Damage, C. S. Papacostas, Wayne M. Hamaguchi, Harold S. Hamada and John Jaquess, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p607-616.

Ground-Motion and Soil-Response Analyses for Len-inakan, 1988 Armenia Earthquake, M. K. Yegian, V. G. Ghahraman and G. Gazetas, GT Feb. 94, p330-348.

Harbor and Marina Improvements McKinley Marina Milwaukee, Wisconsin, Greg High and Dave Werren, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p489-498.

Seismological, Soil and Valley Effects in Kirovakan, 1988 Armenia Earthquake, M. K. Yegian, V. G. Ghahraman and G. Gazetas, GT Feb. 94, p349-365.

Damage patterns

Sines Breakwaters Monitoring Program, C. Pita, F. Abecasis and A. Fernandes, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p408-427.

Damage prevention

Damage Containment and Residual Strength of Composite Laminates, C. S. Chu, AS Apr. 94, p240-243.

Damage Prediction in Reinforced Concrete Structures under Cyclic Loading, B. Garstka, W. B. Krätzig and F. Stangenberg, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p280-289.

Effectiveness of Storm Shutters in Hurricane Damage Prevention, Raja R. A. Issa, Camille A. Issa, Ajay Shanker and Paul Gencorelli, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p486-495.

Engineering of the Building Envelope "To Do Or Not To Do", Norris Stubbs and Dale C. Perry, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994),

Measuring the Benefits of Flood Risk Reduction, Leonard Shabman, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p122-135.

Redefining the Roles Insurers and Engineers Play in Hurricane Preparedness and Mitigation, Eugene L. Lecomte, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad So-

tani, ed., 1994), p1-9.

Reducing the Risks of Severe Windstorm Disaster; an International Perspective, Alan G. Davenport, (Hurricanes of 1992: Lessons Learned and Implications for the Fu-ture, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p147-157.

Relationships between n-Day Flood Volumes for Infrequent Large Floods, James B. Balocki and Stephen J. Burges, WR Nov./Dec. 94, p794-818.

Risk-Based Analysis for Flood Damage Reduction, Darryl W. Davis and Michael W. Burnham, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p194-200.

Wind Effects and Countermeasures During Erection of a Cable-stayed Bridge, S. G. Arzoumanidis, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p881-886.

The Winds of Change? Paul Tarricone, CE Jan. 94, p42-45.

Damages

Dredging in 3D - Delays, Damages and Disputes, Frank McDonough, Patrick A. McGeehin and Steven Kmieciak, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1305-1314.

An Application of a Coulomb Damped Mass Device, Apostolos Fafitis and Debra S. Larson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p399-404.

Applications of Viscoelastic Dampers to High-Rise Buildings, C. S. Tsai and H. H. Lee, ST Apr. 93, p1222-1233.

Approximate Random Vibration Analysis of Classically Damped MDOF Systems, C. Papadimitriou and J. L. Beck, EM Jan. 94, p75-96.

Characterization of an ER Active Member, Henri P. Gavin and Robert D. Hanson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p863-868.

Constitutive Model for Viscoelastic-Fluid Dampers, Nicos Makris, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p857-862.

Damping Systems for Controlling Wind Induced Motions of Structures, Ahsan Kareem and Yukio Tamura, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p845-850.

Dynamic Model for Analysis of Concrete Pavements, Karim Chatti, John Lysmer and Carl L. Monismith, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p984-989.

Dynamic Response of Steel Fiber Reinforced Concrete, David H. Sanders and Qiudong Wu, (Structures Con-gress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p833-838.

Earthquake Barrier Technology: Sliding-Friction Energy Dissipation, Marc S. Caspe, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1018-

Estimation of Damping Ratio of Cable-Stayed Bridges for Seismic Design, Kazuhiko Kawashima, Shigeki Unjoh and Meguru Tunomoto, ST Apr. 93, p1015-1031.

Extraction of Dynamic Soil Properties Using Extended Kalman Filter, Jeen-Shang Lin, GT Dec. 94, p2100-2117.

Hi-Tech Seismic Rehabilitation of 'Casino De Montreal', Claude Pasquin, Avtar Pall and Rashmi Pall, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1292-1297.

Multiaxial Cyclic Plasticity Model for Clays, Ronaldo I. Borja and Alexander P. Amies, GT June 94, p1051-

Nonlinear Dynamic Response of an RC Structure with Advanced Cladding, Loai F. El-Gazairly, Barry J. Goodno and James I. Craig, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1262-1267. Nonlinear Response of Torsionally Coupled Base Isolated Structure, R. S. Jangid and T. K. Datta, ST Jan. 94, p1-

A Probabilistic Approach to the Response of Tall Build-ings to Wind Loadings, Morteza A. M. Torkamani and Ramadan S. Murad, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1439-1444.

Response Study of a Flexible Building Using Three Earthquake Records, M. Çelebi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1220-1225.

Seismic Response Control of Bridges by Variable Dampers, Kazuhiko Kawashima and Shigeki Unjoh, ST Sept. 94, p2583-2601.

Single-Degree-of-Freedom Nonlinear Homogeneous Systems, José A. Inaudi, George Leitmann and James M. Kelly, EM July 94, p1543-1562.

A Smoother Ride to Vibration Damping, CE May 94, p13-

Some Aspects of Determination of Pile Capacity by the Wave Equation, Mark R. Svinkin and Wondem Teferra, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p946-951.

Utilizing Visco-Elastic Dampers in the Seismic Retrofit of a Thirteen Story Steel Framed Building, Patrick Crosby, James Kelly and J. P. Singh, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1286-1291.

Viscous Damping in Inelastic Structural Response, Dionisio Bernal, ST Apr. 94, p1240-1254.

Estimation of Structural Damping of Buildings, Yukio Tamura, Masaaki Yamada and Haruhiko Yokota, (*Structures Congress XII*, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1012-1017.

Alternatives for Overtopping Protection of Dams, Task Committee on Overtopping Protection of the Hydraulics Division of the American Society of Civil Engineers, (Noel R.(Randy) Oswalt, chmn.), 1994, 0-7844-0004-0,

Application of Fuzzy Logic in Civil Engineering in Japan. Hitoshi Furuta, (*Computing in Civil Engineering*, Khalil Khozeimeh, ed., 1994), p1900-1907.

Application of the PCRSS Reservoir Simulation Model to the Salt River Project, Jon S. Behrens and Yvonne Reinink, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p295-298.

ASDSO to Archive Data on U.S. Dams, CE Oct. 94, p25. Changing Dam Operating Criteria to Accommodate Aquatic Biological Diversity, Daniel F. Luecke, (Water Policy and Management: Solving the Problems, Darrell G.

Fontane, ed. and Harry N. Tuvel, ed., 1994), p218-221 Consider Economy and the Environment (ltr), CE May 94,

Corrections (ltr), CE Apr. 94, p30. A Deep Soil Mix Cutoff Wall at Lockington Dam, Ohio, Andrew D. Walker, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p133-145.

Design and Operation of a System to Monitor Sediment Deposition for Protection of an Endangered Mussel, Michael S. Griffin and David S. Mueller, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p472-481.

Detecting Dam Failures, C. Michael Knarr, Thomas J. Barker and Stephen F. McKenery, CE June 94, p66-67. DSM Saves the Dam, Andrew D. Walker, CE Dec. 94, p48-51.

Season Discharge, E. V. Richardson, (Hydraulic Engineering '94, George V. Oxtroneo, ed. and Ralph R. Rumer, ed., 1994), pl 15-119.

Estimation of Spillway Free Jet Trajectory Lengths, Peter J. Rae and Diana Hurdowar-Castro, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p421-425.

Evaluating the Steady State Stochastic Dynamic Program-ming Model for the High Aswan Dam, H. Abdelkader, J. Labadie and D. Fontane, (Water Policy and Manage-ment: Solving the Problems, Darrell G. Fontane, ed. and

Harry N. Tuvel, ed., 1994), p826-829.

Farakka Barrage - It's Impacts and Possible Mitigation, M. Asafuddowlah and Sufian A. Khondker, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p120-124.

Fish Passage/Protection: Big Costs, Little Data, CE June 94, p29.

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Georgia Dams Hit Hard in Flooding from Tropical Storm, NE Aug. 94, p5.

Historical and Enhanced Edwards Aquifer Recharge, Samuel K. Vaugh, Kelly J. Kaatz and Kenneth L. Choffel, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p380-383.

Hydraulic Model Readies River for 1996 Olympics, CE Mar. 94, p26.

Impacts of Low Flows on the Alluvial Rivers of the South-Impacts of Low Flows on the Alluvial Rivers of the Southerwest Region of Bangladesh, Daryl B. Simons, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p125-129.
An Improved Design of Excluding Sediment into River Intake Structures, Wu-Sung Ke, Sue-Jen Wu and Che-Yuan Huang, (Hydraulic Engineering '94, George V. Cotroneo and and Beleb P. Purpure ed. 1004, p103.

Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1193-1197.

An Improved Design of Fishways Under High Variation of Headwater, Kuo-Cheng Hsieh, Sue-Jen Wu and Che-Yuan Huang, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p457-

In-Situ Measurements of Dynamic Soil Properties and Liq-uefaction Resistances of Gravelly Soils at Keenleyside Dam, Ken K. Y. Lum and Li Yan, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p221-240.

Instability of Sandbars in Grand Canyon, Muniram Budhu

and Roger Gobin, HY Aug. 94, p919-933.

Involving the Public to Reach Consensus in Water Resources Projects - An Interdisciplinary Perspective, Lee Judd, Ken Steele, Sara Katz and Scott McCreary, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p513-516.

January Cover Photo is Misleading (ltr), CE Mar. 94, p36. Laboratory and Field Evaluation of Acoustic Velocity Meters, Tracy Vermeyen, (Fundamentals and Advance-ments in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p43-52.

Life (and Travel) on the Mississippi Gets Better, CE Aug.

Management of Recharge Dams in Saudi Arabia, Fouad F. Al-Muttair, Uygur Sendil and Abdulaziz S. Al-Turbak, WR Nov./Dec. 94, p749-763.

Management of Sediments on the Red River Waterway Project, Phil G. Combs, C. Fred Pinkard, Jr., William H. Espey, Jr. and Ben Littlepage, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1125-1130.

Marketing for Emergencies, ME Jan./Feb. 94, p11. Nakajima Subsurface Dam, Satoshi Nagata, Kazuki Azuma, Masato Asano, Teruyuki Nishijima, Hideaki Shiiba, David S. Yang and Reika Nakata, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p437-440.

Non-Intrusive Experimental Setup for Inflatable Dam Models, T. A. Economides and D. A. Walker, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p500-508.

Permanent Deformation on Preexisting Sliding Surfaces in Dams, George Gazetas and Nasim Uddin, GT Nov. 94,

p2041-2061.

Potential for Seepage Erosion of Landslide Dam, William Meyer, R. L. Schuster and M. A. Sabol, GT July 94, p1211-1229.

Prediction of Accretion Below Muhuri Closure Dam in Bangladesh, Mohammad Monowar Hossain and Mohammad Shahabuddin, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1141-1145. Probable Maximum Flood Estimation for New and Exist-

ing Dams, Anand Prakash, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p361-365.

Strain Measurement on the Runner of a Hydroelectric Turbine, K. Warren Frizell, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p416-424.

Undrained Shear Strength of Liquefied Sands for Stability Analysis, Timothy D. Stark and Gholamreza Mesri, GT

Nov. 92, p1727-1747.

Water Infrastructure Risk Ranking and Filtering Method, Tomas Dolezal, Yacov Y. Haimes and Duan Li, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p56-72.

Water Stop Aids Hudson Rehab, CE June 94, p91.

Analysis of Arch Dams, Alexander Michael Ansah, ST

May 93, p1516-1538.

Nonlinear Hydrodynamic Pressures on Arch Dam Faces, Bang-Fuh Chen and Ing-Sen Yuan, (Hydraulic Engi-neering '94, George V. Cotroneo, ed. and Ralph R. Ru-mer, ed., 1994), p411-415.

RCC For Seismic Design, Noel C. Wong, Michael P. Forrest, Sr. and Sze-Hang Lo, CE Sept. 94, p60-62.

Application of NLFM Models to Predict Cracking in Concrete Gravity Dams, Sudip S. Bhattacharjee and Pierre Léger, ST Apr. 94, p1255-1271.

Checking Concrete Growth, Vann A. Newell, David T. Tanner and Charles D. Wagner, CE Jan. 94, p70-72.

Nonlinear Earthquake Analysis of Concrete Gravity Dams Including Sliding, Juan W. Chávez and Gregory L. Fenves, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p173-182.

Numerical Modeling of Tensile Crack Propagation in Con crete Dams, Ram Kumar and G. C. Nayak, ST Apr. 94,

p1053-1074.

Repair of Abrasion/Erosion Damage to Vallecito Dam with Silica Fune Concrete, Stan Mattingly and Glenna Win Silica Fune Concrete, Stan Mattingly and Glenn Smoak, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p735-742.

Simplified Dynamic Analysis for Gravity Dams, A. Ghobarah, Ahmad El-Nady and Tarek Aziz, ST Sept. 94,

p2697-2716.

Uplift Modeling for Fracture Mechanics Analysis of Concrete Dams, Raymond R. Dewey, Ronald W. Reich and Victor E. Saouma, ST Oct. 94, p3025-3044.

Dams, earth

Robinson and Gregory J. Hanson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p431-435.

Three-Dimensional Seismic Analysis of La Villita Dam, A.-W. Elgamal, GT Dec. 92, p1937-1958.

Dams, embankment

Analysis of the Juturnaiba Embankment Dam Built on an Organic Soft Clay, Roberto Q. Coutinho, Márcio S. S. Almeida and Jose Bernardino Borges, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p348-363. Damage Mechanisms and Influence of Gradation for Steep Riprap, Karol Rohan, Mahrez Ben Belfadhel, Oscar Dascal and Guy Lefebvre, GT Mar. 94, p514-527

Dynamic Compaction to Remediate Liquefiable Embank-ment Foundation Soils, Karl Dise, Michael G. Stevens and J. Lawrence Von Thun, (In-Situ Deep Soil Improve-ment, Kyle M. Rollins, ed., 1994), p1-25. Field Performance and Analysis of Steep Riprap, Guy Lefebvre, Karol Rohan, Mahrez Ben Belfadhel and Opera Pacal GT Ser 20, 21421-1449

Oscar Dascal, GT Sept. 92, p1431-1448.

The Mechanics of Cracking in Embankment Dams, James R. Talbot, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p118-131.

Performance of Nanhua Dam During Construction, Hsien-Chang Kao and Jin-ching Chern, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p417-

Reliability Applied to Slope Stability Analysis, John T. Christian, Charles C. Ladd and Gregory B. Baecher, GT

Dec. 94, p2180-2207. Wanapum Dam Embankment Settlement Study, M. Gene Yow, Thomas R. Hollingsworth and David D. Moore, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p337-347.

Dams, gravity

Simplified Dynamic Analysis for Gravity Dams, A. Gho-barah, Ahmad El-Nady and Tarek Aziz, ST Sept. 94, p2697-2716.

Dams, rockfill

Three-Dimensional Seismic Analysis of La Villita Dam, A.-W. Elgamal, GT Dec. 92, p1937-1958.

Darcy's law

Nonlinearity and Free-Surface Flow, Nazeer Ahmed, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p327-331.

Data analysis

Analysis of Missouri River System Operations Alternatives, Roy McAllister, Lawrence Cieslik, Tom Cannon and Lon Hachmeister, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p814-817. Analyzing Field Data for Hazen-Williams and Darcy-

Weisbach Equations, Donald Clark, (Hydraulics of Pipe lines, Deon T. Fowles, ed. and Douglas H. Wegener, ed.,

1994), p1-9.

Consolidation of Ground Reclaimed by Inhomogeneous Clay, Hiroyuki Tanaka, (Vertical and Horizontal Defor-mations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1262-1273.

Development of Environmental Impacts Model for Missouri River System, Robert Loveless and Ray Walton, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p754-757.

Evaluating Concrete Mesoscale Properties Using Neural Networks, John E. Bolander, Jr., Toshihiro Ebihara and Hiroshi Hikosaka, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p475-482

Evolutionary Fourier Analysis of Wave Data, Leon E. Borgman, Mihail Petrakos and Chao Li, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p708-725.

An Information Engineering Approach for Environmental Impact Assessment and Monitoring Program, Chun-Hou Orr and Shu-Fang Peng, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p249-256.

Simple Equations to Express Settling Column Data, Adem Ozer, EE May/June 94, p677-682.

Spectral Representation of High-Frequency Space Shuttle Data, P. D. Spanos, L. J. Mushung, D. A. Nelson, Jr. and D. A. Hamilton, AS July 94, p315-327.

Subbottom Profiling of a Sand Capped Disposal Mound, Peggy Murray, Mary Wiley, Douglas Pabst and Brian May, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1285-1294.

A Thousand Points of Data, William Ronald Woods and Daniel Steven Krasno, CE June 94, p54-56.

Validation of Coastal Morphodynamic Models with Field Data, Helen M. Wallace and Tim J. Chesher, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p114-128.

Water Reclamation Potential in Southern California to the Year 2010, Bahman Sheikh, (Water Policy and Manage-ment: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p661-664.

Data collection

- Addendums to the Prediction Package, Robert Gibbens, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p86-91.
- Applying Multimedia Technology to Project Control, L. Y. Liu, A. L. Stumpf and S. S. Kim, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p608-613.
- Automated Corrective Action Selection Assistant, Alan D. Russell and Aminah Fayek, CO Mar. 94, p11-33.
- Automatic, Remote, Multiplexed Geotechnical Measurements with Time Domain Reflectometry (TDR), Charles H. Dowding and Fei-chiu Huang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1220-
- Case Storage of Planning Knowledge for Power Plant Construction, Ren-Jye Dzeng and Iris D. Tommelein, (Comouting in Civil Engineering, Khalil Khozeimeh, ed., 1994), p293-300.
- Comparison of Traditional and Neural Classifiers for Pave-ment-Crack Detection, Mohamed S. Kaseko, Zhen-Ping Lo and Stephen G. Ritchie, TE July/Aug. 94, p552-569.
- A Comprehensive Bridge Management System for Illinois, Allen R. Marshall, Todd Ahrens and Paul D. Thompson, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1859-1866.
- Computer Control of CSOs, Russell W. Batzell, CE Nov. 94, p58-59.
- Computer-Assisted Planning, Programming, Budgeting System (CAPPB), Bruce C. Goettel, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p390-395.
- Contemporaneous Development of Field Data: Transportation Construction Claim Defense, Kenneth H. Dunne and George Navarrete, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2124-2135.
- Critique: Rebuilding and Recovery, Ben L. Sill, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p300-302.
- Daily Procedure for GLFS Nowcasts, Chieh-Cheng J. Yen, John G. W. Kelley and Keith W. Bedford, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p202-206.
- Damage to Engineered Structures at Homestead AFB, Maurice R. Harlan, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p213-222.
- Data and Prediction Request for the Spread Footing Prediction Event, Robert Gibbens and Jean-Louis Briaud, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p11-85.
- Data Capture with GPS for Sewer Map Updates, John S. Gresh and Rodolfo B. Fernandez, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1615-
- Data Needs for Evolving Motor Vehicle Emission Modeling Approaches, Randall Guensler, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p167-196.
- The Delta Flume'93 Experiment, A. S.-Arcilla, J. A. Roelvink, B. A. O'Connor, A. Reniers and J. A. Jiménez, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p488-502.

Design and Execution of Hydrodynamic Field Data Collection using Acoustic Doppler Current Profiling Equipment, Timothy L. Fagerburg and Thad C. Pratt, (Funda-mentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p530-538.

Design and Testing of the NDBC Wave Processing Mod-ule, Joel N. Chaffin, William Bell, Kathleen O'Neil and Chung-Chu Teng, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hems-

ley, ed., 1994), p277-286. Design Waves and Wave Spectra for Engineering Applications, Chung-Chu Teng, Gerald L. Timpe, Ian M. Palao and David A. Brown, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p993-1007.

The Development of a Wave Data Analysis Standard for a National Wave Measurement Program, Michael Tubman, Marshall Earle and David McGehee, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and

J. Michael Hemsley, ed., 1994), p547-553.

Development of Environmental Impacts Model for Missouri River System, Robert Loveless and Ray Walton, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

Directional Wave Data - Measurements and Modeling Coast of Florida Erosion and Storm Effects Study, Thomas D. Smith and Jon M. Hubertz, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p76-89.

Drought and Water-Supply Management: Roles and Responsibilities. Neil S. Grigg and Evan C. Vlachos, WR

Sept./Oct. 93, p531-541.

Effects of Force Reflection on Telerobotic Performance, Raymond Dick, Terry Faddis and Bill Barr, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p259-268.

Empirical Performance Comparison for Symbolic and Subsymbolic Learning Systems, Tomasz Arciszewski, Adam Borkowski, Tomasz Dybala, Janusz Racz and Piotr Wojan, (Computing in Civil Engineering, Khalil

Wojai, (Companing in Crit Languering, Ralam Khozeimeh, ed., 1994), p1075-1082.

EPA's Environmental Monitoring and Assessment Program: Availability of Broad-Scale Environmental Data and Opportunities for Use in Environmental Modeling Applications, Richard W. Latimer, John F. Paul and Jeffrey S. Rosen, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p509-521.

Equilibrium Beach Profiles on the Catalan Coast, J. P. Sierra, A. Lo Presti and A. Sánchez-Arcilla, (*Coastal Dynamics* '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p432-445.

Experiences with an Undergraduate Structural Engineering Laboratory, Stephen Pessiki, Le-Wu Lu and Ben T. Yen, (Structures Congress XII, N. C. Baker, ed. and Barry J.

Loodno, ed., 1994), p1369-1374.

Exploratory Studies Facility Test Implementation and Integration with Construction and Design, Deirdre M. Boak, Ned Z. Elkins, Richard Kovach and Ronald D. Oliver, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1770-1773.

Flood Monitoring Network In Southeastern Louisiana, Brian E. McCallum, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p346-350

Generic Data Acquisition System for Robotic Waste Characterization, John T. Feddema and Barry L. Spletzer, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p320-328.

GIS Matches As-Built Drawings with Reality, CE Jan. 94,

p13-14.

Ground-Water Recharge in Fortymile Wash Near Yucca Mountain, Nevada, 1992-93, Charles S. Savard, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1805-1813.

How Many Observation Wells Does it Take to Find a Groundwater Contamination Plume? Bruce R. James and Steven M. Gorelick, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p197-199.

Hydro Plant Research Data Acquisition System, James E. Donegan, Julia Crittenden Tarbell and John F. Doyle, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p477-481.

The ICR; \$130 Million of Water Quality Monitoring, Albert Ilges and Fredrick W. Pontius, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p788-791.

Identification of A Field Data Collection Program in Delaware Bay, B. H. Johnson, K. W. Kim, T. L. Fagerberg and H. A. Benson, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

Implementation and Validation of a Global Third-Generation Wave Model at Fleet Numerical Oceanography Center, Paul A. Wittmann and R. Michael Clancy, (Ocean Wave Measurement and Analysis, Orville Magoon, ed. and J. Michael Hemsley, ed., 1994), p406-

Implications of ISTEA and CAAA '90 for Transportation Planning Data Needs, Christopher Fleet and Charles Goodman, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p76-94.

An Information Engineering Approach for Environmental Impact Assessment and Monitoring Program, Chun-Hou Orr and Shu-Fang Peng, (Computing in Civil Engineer-ing, Khalil Khozeimeh, ed., 1994), p249-256.

An Integrated Computer Model for Project Schedule Up-dating, Walid Y. Thabet and Ayman A. Morad, (Com-puting in Civil Engineering, Khalil Khozeimeh, ed., 1994), p743-750.

Inverse Transient Analysis in Pipe Networks, James A. Liggett and Li-Chung Chen, HY Aug. 94, p934-955.

A Knowledge-Intensive Database System for Making Effective Use of Construction Lessons Learned, Nabil Kartam, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1139-1145.

Laboratory and Field Evaluation of Acoustic Velocity Meters, Tracy Vermeyen, (Fundamentals and Advance-ments in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p43-52.

Managing Traffic With Real-Time Transponders, Richard W. Doering, CE Sept. 94, p68-69.

A Method for Locating Spikes in a Measured Time Series, James P. McKinney, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hems-ley, ed., 1994), p388-393.

Mobile GIS Technologies, John Alexander, Jerry Merckel, Kirk Upthegrove and David Martini, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1623-1630.

Modeling Initial Mixing of Ocean Wastewater Discharges to Develop Toxic Effluent Limitations, Christopher C Obropta and Scott T. Taylor, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1047-1054.

Multimedia Based System for Analyzing Production Or-ganizations, Hans C. Björnsson and Per Sagert, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1405-1411.

Multimedia Technologies for Civil and Construction Engineering Professional Practice, Jorge A. Vanegas and Gary Smith, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p592-599.

NASA's Mission to Planet Earth: Will Civil Engineering Reap Benefits? John H. McElroy, El Oct. 94, p401-404.

NDBC Wave Data-Current and Planned, K. E. Steele and Theodore Mettlach, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p198-207.

New Program for the Marine Observation and Prediction Center of the Central Weather Bureau, Beng-chun Lee, (Ocean Wave Measurement and Analysis, Orville Magoon, ed. and J. Michael Hemsley, ed., 1994), p124-134

An Object-Oriented Scheduling Data Acquisition Model Using a Hybrid Expert System, Kyungrai Kim, Calin M. Popescu and Gary D. Hamilton, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p356-361.

Pen Computers in Civil Engineering, Don M. Newell, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p1631-1638.

Real-Time Data Collection of Scour at Bridges, David S. Mueller and Mark N. Landers, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p104-113.

Representation of Case Memory for Structural Design, Mary Lou Maher, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2030-2037.

SCADA System Controls Combined Sewer Overflow Regulation System to Optimize Wastewater Collection, Russell W. Batzel, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p822-828.

Sensors and Techniques for Structural Monitoring, R. D. Marshall, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1379-1384.

So Much Pavement, So Little Time, Paul Tarricone, CE Nov. 93, p40-43.

Soil-Cover Success, Issa S. Oweis, George Dakes, Thomas Marturano and Richard Wierer, CE Oct. 94, p58-59.

A Survey of Stormwater Infiltration Basins in the Puget Sound Region, Karin Hilding and Rich Horner, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p722-

Technologies for Planning Railroad Track Maintenance and Renewal, Donald Uzarski and Sue McNeil, TE Sept./Oct. 94, p807-820.

A Thousand Points of Data, William Ronald Woods and Daniel Steven Krasno, CE June 94, p54-56.

Threshold Precipitation Events and Groundwater Recharge, Richard H. French and Roger L. Jacobson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p298-302.

Velocity and Turbulence Measurement from the Illinois and Mississippi Rivers, Ta Wei Soong and Nani G. Bhowmik, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p62-75.

Wave Transformation Measurements at SUPERTANK, David L. Kriebel and Jane M. Smith, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicho-

las C. Kraus, ed., 1994), p233-247.

What is Computational Hydraulics? Angelos N. Findikakis, A. Blumberg, R. Schmalz and K. Bedford, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Engineering Rumer, ed., 1994), p482-486.

Where is the Pendulum Now? Do We Really Know? D. R. Wheeler, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p155-167.

Data collection systems

Application of a Needle Probe in Measuring Local Param ters in Air-Water Flow, A. R. Zarrati and J. D. Hardwick, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p296-300.

Capturing As-built Project Information for Facility Management, L. Y. Liu, A. L. Stumpf, S. S. Kim and F. M. Zbinden, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p614-621.

Image-Based Expert-System Approach to Distress Detec-tion on CRC Pavement, Stephen Tsao, Nasser Kehtama-vaz, Paul Chan and Robert Lytton, TE Jan./Feb. 94,

Monitoring of Structures During Repair of Underground Utilities, F. Dirk Heidbrink and John E. Pearson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p258-263.

Site Investigation Surveys for Dredging Projects, S. J. Plasman and J. Peuchen, (*Dredging '94*, E. Clark McNair,

Jr., ed., 1994), p322-331. Video-Based Data System Keeps Traffic Moving, ET Oct./

Nov. 94, p1,4-5.

Data communication

2D Bar-Code Applications in Construction, Bob G. McCullouch and Kamolwan Lueprasert, CO Dec. 94,

Issues and Experiences in Developing Shared Object Models, D. H. Douglas Phan and H. Craig Howard, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p584-591.

Steel Detailing Neutral File from Modeling Software, Gerardo Cisneros and J. A. Bohinsky, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p254-259.

Database Integration in Support of Construction Manage-ment, A. B. Cleveland, Jr. and J. F. Skolnick, (Comput-ing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2054-2057.

Data handling

Automated Sensor Tester, Dave Hayward, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p158-165.

Deductive Databases in Engineering, Sivand Lakmazaheri, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p806-813.

EDI and Its Role in Information Management, G. Edward Gibson, Jr., Lansford C. Bell and Clarisse Molad, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1798-1805.

Effective Project Planning Techniques, Christian A. Jensen, CE Feb. 94, p66-67.

CLESVIEW GLFS Product Viewing Application, Yi-Fei P. Chu, Chieh-Cheng J. Yen and Keith W. Bedford, (Hydraulic Engineering) '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p207-211.

Integrated Product Models, Charles M. Eastman, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p1188-1195.

Integrated System Environment Using an Object-Oriented Project Model with Multiple-Views, Kenji Ito, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1204-1211.

Integrating Pen Computers with Other Keyless Data Systems for Construction Applications, Richard J. Coble and Charles J. Kibert, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1639-1646.

Management Information System Application on a Multi-Million Overseas Project, Gamil F. Fanous and Mufid F. Samara, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2157-2174.

The National Spatial Data Infrastructure and its Usefulness to the Dredging Community, Milington Lockwood, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p516-

Quality Assurance and Quality Control in Laboratory Bioassays of Dredged Material, David W. Moore, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p728-736.

A Sonobuoy-Sized Expendable Air-Deployable Directional Wave Sensor, Marshall D. Earle, Ralph H. Orton, Harry D. Selsor and Kenneth E. Steele, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p302-315.

A Version and Configuration Scheme for Collaborative Engineering, Karthik Krishnamurthy and Kincho Law, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2022-2029.

Data processing

Buoy Directional Wave Measurements Using Magnetic Field Components, David W. Wang, C. C. Teng and R. Ladner, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p316-329.

Data Fusion for an ATIS Operational Test: Description and Computational Issues, Nagui M. Rouphail and Peter Nelson, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1532-1535.

Data Management for Large-Scale Water-Distribution Op-timization Systems, S. Pezeshk, WR Jan./Feb. 94, p116-120

Design and Testing of the NDBC Wave Processing Mod-ule, Joel N. Chaffin, William Bell, Kathleen O'Neil and Chung-Chu Teng, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hems-ley, ed., 1994), p277-286.

Design—Cornerstone of Your Career: Advice for Young Engineers, Rodney Attwood, El July 94, p241-245.

Discovering New Ways to Process Environmental Data, Philip A. Naecker and Robert B. Irvin, CC June 94, p10-11.

Effect of Data Sampling Time Resolution on Probability Distribution of Elapsed Time Between Rainfalls, James W. Ellerbroek, Ben Chie Yen and Robert Riggins, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p336-340.

GDE: New Approach to Graphical Modeling, M. Krzaczek, CP Jan. 94, p103-124.

Heuristic Algorithms for Aggregating Rail-Surface-Defect Data, Roemer M. Alfelor and Sue McNeil, TE Mar./Apr. 94, p295-311.

A Human Factors Approach to Waste Form Design, Mi-chael A. Rodriguez, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p684-690.

An Interactive Computer Code for Generations of Artificial Earthquake Records, D. L. Karabalis, G. J. Cokkinides, D. C. Rizos, J. S. Mulliken and R. Chen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1115-1122.

Mapping 2-D and 3-D Velocity Components in Circular Conduits Using an Electromagnetic Current Meter and a 5-Hole Pilot Probe, Joseph J. Orlins and Lawrence J. Swenson, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p53-61.

Strong-Motion Data Processing, A. Gerald Brady and April M. Converse, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1600-1605.

Applying Multimedia Technology to Project Control, L. Y. Liu, A. L. Stumpf and S. S. Kim, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p608-613.

Coastal Engineering Data Retrieval System (CEDRS), Danielle S. McAneny and Doyle L. Jones, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p330-338.

A Multi-Media System for Organizing Construction Docu-Minter Media System for Organizing Construction Documents, Rajaram Ganeshan, Simon Kim, Liang Liu and Annette Stumpf, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1381-1388.

Water-Quality Data Management: Survey of Current Trends, Laurel Saito, Neil S. Grigg and Robert C. Ward, WR Sept./Oct. 94, p587-612.

Discovering New Ways to Process Environmental Data, Philip A. Naecker and Robert B. Irvin, CC June 94, p10-11.

GIS Matches As-Built Drawings with Reality, CE Jan. 94, p13-14.

Water-Quality Data Management: Survey of Current Trends, Laurel Saito, Neil S. Grigg and Robert C. Ward, WR Sept./Oct. 94, p587-612.

Database management systems

2D Bar-Code Applications in Construction, Bob G. McCullouch and Kamolwan Lueprasert, CO Dec. 94, p739-752.

Aspects of Virtual Master Builder, Victor E. Sanvido, Steven J. Fenves and John L. Wilson, El July 92, p261-278

Capturing As-built Project Information for Facility Management, L. Y. Liu, A. L. Stumpf, S. S. Kim and F. M. Zbinden, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p614-621.

Characteristics of the US Highway Bridge Population, Kenneth F. Dunker and Basile G. Rabbat, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1006-1013.

Comparing Two OODBMSs: An Application Developer's Perspective, Nancy K. Wiegand and Teresa M. Adams, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p1412-1418.

Computer Aided Design in Civil Engineering Based Upon the OODBMS ONTOS, Karlheinz Lehner and Dietrich Hartmann, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1419-1425.

Data Management for Large-Scale Water-Distribution Op-timization Systems, S. Pezeshk, WR Jan./Feb. 94, p116-

Database Integration in Support of Construction Management, A. B. Cleveland, Jr. and J. F. Skolnick, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p2054-2057.

A Decision Support System for Nonpoint Source Pollution Management Using a Distributed Model-GIS-DBMS Linkage, Jaewan Yoon and G. Padmanabhan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

Deductive Databases in Engineering, Sivand Lakmazaheri, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p806-813.

Effective Project Planning Techniques, Christian A. Jensen,

CE Feb. 94, p66-67.

EPA's Environmental Monitoring and Assessment Program: Availability of Broad-Scale Environmental Data and Opportunities for Use in Environmental Modeling Applications, Richard W. Latimer, John F. Paul and Jeffrey S. Rosen, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p509-521.

Facilitate Delay Claim Analysis with As-Built Schedule Databases, John R. Knoke and Gary H. Jentzen, (Computing in Civil Engineering, Khalil Khozeimeh, ed.,

1994), p2104-2111.

A Frame-Based Drawing Management System Based on Building Object Model, Gakuhito Hirasawa and Yusuke Yamazaki, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p555-562

Functional Analysis of the Envelope Design Process for In-tegrated Building Design, Hugues Rivard, Claude Bédard, Kinh H. Ha and Paul Fazio, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p71-78. Information, Global-Style, Javier A. Baldor, WP Spring 94,

Integrated GIS for Construction Site Investigation, Amr R. Oloufa, Ahmed A. Eltahan and C. S. Papacostas, CO

Mar. 94, p211-222.

An Integrated Shell (ROSS3) for Transport Modeling, Visualization, and Data Management, Keerthisiri S. Angam-mana, Poojitha D. Yapa and Hung Tao Shen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p150-154.

Integrated System to Develop Highway Rehabilitation Projects, Sarosh I. Khan, Stephen G. Ritchie and Karl Kampe, TE Jan./Feb. 94, p1-20.

An International Knowledge Database for Ground Improvement Geo-Systems, C. John Yoon, Theva Thevanagayam and Ilan Juran, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p277-284.

Knowledge Representation and Processing in Relational Data Base, Teresa M. Adams, CP Apr. 93, p238-255

Management Information System Application on a Multi-Million Overseas Project, Gamil F. Fanous and Mufid F. Samara, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2157-2174.

A Multi-Media System for Organizing Construction Documents, Rajaram Ganeshan, Simon Kim, Liang Liu and Annette Stumpf, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1381-1388.

New Technology in Coastal Wave Monitoring, Richard Seymour, David Castel, David McGehee, Juliana Thomas and William O'Reilly, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p105-123.

Object-Oriented Modeling of Design System for RC Buildings, Ziga Turk, Tatjana Isaković and Matej Fischinger,

CP Oct. 94, p436-453.

Objects: the CADD/GIS Common Denominator, Paul Scarponcini, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1764-1771.

OODBMS in AEC Software Development: The Highs and Lows of Developing a Commercial Application, Gary D. Hamilton, Lisa Bell, Wade Cohn, François Grobler and Kyungrai Kim, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1430-1437

Prototype Object-Oriented System for Maintenance of Timber Trusses, S. H. C. Foo and G. Akhras, CP July 94,

p326-344.

Strengthening the Design/Construction Interface Using Electronic Imaging, Document Management and Work Flow Technologies, Jorge A. Vanegas, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p600-

Traffic Safety Research: Database Issues and Analysis Techniques, Yusuf M. Mohamedshah and Charles C.

Liu, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1846-1853. Transactional Support for Concurrent Finite Element Anal-ysis & Design, Sanjai Tiwari and H. R. Riggs, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p798-805.

Use of Database in Geo-environmental Engineering, Amin Rahman and Thomas J. Moynahan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1251-

A Version and Configuration Scheme for Collaborative Engineering, Karthik Krishnamurthy and Kincho Law, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2022-2029.

Water-Quality Data Management: Survey of Current Trends, Laurel Saito, Neil S. Grigg and Robert C. Ward, WR Sept./Oct. 94, p587-612.

Databases

3-D Coordinates - A Universal Rectangular Coordinate System for a GIS and Other Spatial Databases, Earl F. Burkholder, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p233-240.

Best Route GIS System, Siripong Malasri and L. Yu Lin, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1123-1130.

Brief Summary of National Bridge Scour Data Base, Mark N. Landers, J. Sterling Jones and Roy E. Trent, (Hydrau lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p41-45.

Coastal Engineering Data Retrieval System (CEDRS), Danielle S. McAneny and Doyle L. Jones, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and

Medsurement and Andrysis, Orvine 1: Anagoon, ed. and J. Michael Hemsley, ed., 1994), p330-338. Conceptual Models of Product, Project and Document Data: Essential Ingredients of CIC, Bo-Christer Björk, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p980-987.

Cost-Schedule Integration for Cash-Flow Forecasting Ronie Navon, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1536-1539.

A Coupled GIS-Water Quality Modeling System, Chen-Yu Cheng, J. F. Atkinson and J. V. DePinto, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p247-251.

Creating and Abstracting Lessons-Learned from BCO Reviews, Michael C. Fu and E. William East, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1146-1155.

Database Use in the Engineering Office, Charles E. Bowler, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1874-1879.

Deductive Databases in Engineering, Sivand Lakmazaheri, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p806-813.

Design and Implementation of a Database for Seismic Evaluation of Structures, Steven E. Rahmann and Greg ory L. Fenves, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p790-797.

The Design of a Proactive Cost Feedback System for Construction Project Management, David N. Ford and Feniosky Pena, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1365-1372.

Design of an In-Situ Directional Wave Gage for One Year

Design of an in-Stut Directional Wave Gage for One rear Deployments, Gary L. Howell, (Ocean Wave Measure-ment and Analysis, Orville T. Magoon, ed. and J. Mi-chael Hemsley, ed., 1994), p264-276. Developing an Object Based Planning System for Precast Concrete Building Structures, John I. Messner, Victor E. Sanvido and Masaaki Reda, (Computing in Civil Engi-neering, Khalil Khozeimeh, ed., 1994), p1426-1429.

The Development of a Wave Data Analysis Standard for a National Wave Measurement Program, Michael Tub-man, Marshall Earle and David McGehee, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p547-553.

Developments to the IRMA Model of AEC Projects,

Thomas Froese, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p778-785.
Electronic Yellow Pages for Pre-trip Planning Systems, Prasuna DVG Reddy, Ryuichi Kitamura and Paul P. Jovanis, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1094), p4516-1632. Khozeimeh, ed., 1994), p1516-1523.
Estimating Hydraulic Conductivity of Compacted Clay Liners, Craig H. Benson, Huaming Zhai and Xiaodong

Wang, GT Feb. 94, p366-387.

Fires Deemed to Have Tested Structural Performance, Paul R. De Cicco, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), 1990-1995. Flexible Extracation of Practical Knowledge from Bridge

Databases, Yoram Reich, Steven J. Fenves and Eswaran Subrahmanian, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p1014-1021.

A Framework for a Database of Construction Costs and Prallework for a Database of Construction Cossis and Productivity at the Process Level for Transportation Infrastructure Development, Antonio A. González-Quevedo, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1854-1858.

Functional Analysis Using Partitioned Engineering Data Flow Model, D. H. Douglas Phan and H. Craig Howard,

CP Jan. 94, p2-19.

The Generation and Use of Site Specific Wave and Current Databases for Dredged Material Fate Predictions, Norman W. Scheffner, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p190-199.

Impact of GOES Data on Surface Heat Flux Predictions, Yi-Fei P. Chu, Keith W. Bedford, Carolyn J. Merry and Jay S. Hobgood, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p212-

Integrating Computer Application for Pavement Management: A Case Study, Dimitri A. Grivas, B. Cameron Schultz and Richard Garrabrant, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1951-

Integrating Computer Applications for Traffic Data Analysis, Patricia B. Noyes and Pete d'Oronzio, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1339-1342.

Intelligent Construction Planning, A. Warszawski and O. Shaked, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p972-979.

Intentions and Credences - An Australian Approach to Computerised Building Regulation, Jane Blackmore, Frank Leong and Ron Sharpe, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p131-136.

Knowledge Issues in Modeling, Hossam El-Bibany, (Computing in Civil Engineering, Khalil Khozeimeh, ed.,

1994), p579-583.

A Knowledge-Intensive Database System for Making Effective Use of Construction Lessons Learned, Nabil Kartam, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1139-1145.

The Navigation Data Center and Its Role in Dredging Management, Virginia R. Pankow, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p490-498.

Paper Summary Inventory Assessment of DOE Spent Nuclear Fuels, David G. Abbott, Alan R. Bringhurst and Denzel L. Fillmore, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p320-330.

PC Networking - A Case Study, Chester J. Zaremba, (Computing in Civil Engineering, Khalil Khozeimeh, ed.,

1994), p1867-1873.

Pen Computers in Civil Engineering, Don M. Newell, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1631-1638.

Performance of New York's Long-span Bridges, Satinder P. S. Puri, Richard J. Kratky and Maria Grazia Bruschi, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1022-1031.

Pipe Utility Evaluations With the Aid of GIS, Raymond A. Pittman, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p242-

A program for the Analysis of Pile Load Tests, Rajesh Subramanian and Reda M. Bakeer, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p644-651.

Prototype Applications of Integrated Data Models in Con-struction, M. Betts, P. Brandon, T. Child, G. Cooper and J. Kirkham, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p988-991.

PWR Axial Burnup Profile Database, R. J. Cacciapouti, S. Van Volkinburg and L. A. Hassler, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p739-743.

Sediment Transport Analysis Rio Grande Floodway at San Marcial Gauge, Mohammed A. Samad, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1115-1119.

Software Interface in Engineering Applications, Charles E. Bowler, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1880-1883.

Spectral and Parametric Wave Models of Lake Erie, David J. Welsh and Keith W. Bedford, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p217-221.

Subjective De-Biasing of Data Sets: A Bayesian Approach, M. Elisabeth Paté-Cornell, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p175-185.

Towards Practical Machine Learning Techniques, Yoram Reich, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p885-892.

Using CADD Application to Support Construction Activities, Annette L. Stumpf, Liang Y. Liu, Sangyoon Chin and Kenneth Ahn, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p531-538.

Using GIS Technology to Assess Hurricane Damage, C. S. Papacostas, Wayne M. Hamaguchi, Harold S. Hamada and John Jaquess, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed.

and Mehrdad Sctani, ed., 1994), p607-616.

Validation of a Continental-Scale Storm Surge Model for the Coast of Delaware, David J. Mark and Norman W. Scheffner, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p249-263.

Davis, James E.

Davis Installed as ASCE's New Executive Director, NE Dec. 94, p1.

Davis to be ASCE Executive Director, CE June 94, p75. James E. Davis to Be ASCE's Next Executive Director, NE May 94, pl.

Deane, Curtis C.

Foundation Set Up to Aid ASCE's Relocation to Washington Area; Deane Named Its President, NE Sept. 94, p1.

Debris

Analysis of Structural Debris Generation and Disposal After Hurricane Andrew: Technical Perspective, Berrin Tansel, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p533-538.

An Approach to the Calculation Method of Mean Sediment Size, Yingyan Chen and Huilin Zhao, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p805-809.

Bridge Pier Scour with Debris Accumulation, Bruce W. Melville and D. M. Dongol, HY Sept. 92, p1306-1310.

Case Study of Debris Flow, Robert W. Day, CF Aug. 94, p192-200.

Comparison of Two Eductors for Sand Bypassing, Gregory L. Williams and James E. Clausner, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p875-884.

Conical Test Load Measuring Compressibility, John H. Schmertmann, GT May 93, p965-971.

Debris Removal Operations Following Hurricane Andrew, Rex M. Holmlin, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p539-547.

Design Considerations for Use of Wedge Wire Screens at Surface Water Intake Structures, Mahmood Naghash and Adnan M. Alsaffar, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

Disaster Debris Management and Diversion from Hurri-cane Iniki, Wayne Rifer, Brenda Osterhaug and Dale Burton, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and

Mehrdad Sotani, ed., 1994), p548-557.

Erosion and Deposition by Debris Flows in Mountainous Channels on North Fork Mountain, Eastern West Virginia, Daniel A. Cenderelli and J. Steven Kite, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p772-776.

Experimental Study of Debris Flows, Arbind Mainali and Nallamuthu Rajaratnam, HY Jan. 94, p104-123.

Hydraulic Conditions Required to Move Unanchored Residue Materials, J. E. Gilley, E. R. Kottwitz and G. A. Wie-

man, IR May/June 94, p591-606.

The LEO Particulate Environment as Determined by LDEF, Thomas H. See, Michael E. Zolensky, Friedrich Hörz, Ronald P. Bernhard, Kimberly S. Leago, Jack L. Warren, Clyde A. Sapp, Tammy R. Foster and William H. Kinard, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p618-627.

A Mechanism of Pool Formation and Maintenance in Forest Streams, Richard D. Smith and Robert L. Beschta, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p824-828.

Modeling of Interaction of Small Particulates in Earth Orbit, Anthony F. Beverina and Christopher A. Dobosz, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p597-608.

Newtonian Fluid Mechanics Treatment of Debris Flows and Avalanches, Bruce Hunt, HY Dec. 94, p1350-1363.

Problems with Indirect Determinations of Peak Streamflows in Steep, Desert Stream Channels, Patrick A. Glancy and Rhea P. Williams, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p635-639.

Routing Debris Flows with Particle Segregation, Tamotsu Takahashi, Hajime Nakagawa, Tatsuo Harada and Yousuke Yamashiki, HY Nov. 92, p1490-1507.

Sediment and Debris Removal Inlet Structure for Canal Pipelines, Gilbert Horrocks, H. Lee Wimmer and Pam McMullin, IR May/June 94, p607-616.

Size Characteristics of Debris Flow Deposition, Huilin Zhao and Yingyan Chen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p777.

Space Debris, Ankur Gupta, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p820-825.

Spacecraft Wall Design for Orbital Debris Impact, Shyh-Rong Tzan and Chris P. Pantelides, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p378-387.

Decay

Above and Below Boiling Thermal Loading Strategies for Large Waste Packages, Marvin L. Smith, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2146-2151

Active Versus Passive Radon Monitoring at the Yucca Mountain Site, Michael D. Griffin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1953-1958. Natural Decay Resistance of Glued-Laminated Beams, Stephen L. Quarles, Kevin A. Flynn, William A. Dost and Mark G. Dietz, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p707-712.

Nondestructive Evaluation of Wood, Robert J. Ross and Roy F. Pellerin, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1233-1241.

Decision making

Analogy-Based Solution to Markup Estimation Problem, Tarek Hegazy and Osama Moselhi, CP Jan. 94, p72-87.

Analysis and Evaluation of Alternative Technologies, Simaan M. AbouRizk, Srinivasa R. Mandalapu and Miroslaw Skibniewski, ME May/June 94, p65-71.

Bayes' Theorem and Quantitative Risk Assessment, Stan Kaplan, (Risk-Based Decision Making in Water Re-sources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p186-193.

Behavioral, Social, and Institutional Aspects of Risk Analysis, Richard C. Schwing, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p340-341.

Building Groundwater Optimizers That Respond to the Needs of Decision-Makers, David E. Dougherty, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p347-350.

Can Long Term Criteria for Deep Disposal be Implemented, K. Bragg, (High Level Radioactive Waste Manage-ment, High Level Radioactive Waste Program Commit-

tee, 1994), p1397-1403.

Considering Uncertainties in Water Resource Designs, Yeou-Koung Tung, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p457-460.

Decision Analysis of Hanford Underground Storage Tank Waste Retrieval Systems, M. W. Merkhofer, D. A. Bitz, D. L. Berry and L. J. Jardine, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1739-1744.

Decision-Making Paradigm for Risk Assessment of Hazardous Wastes Using Fuzzy Sets, Timothy Ross, Joseph Trumm and Sunil Donald, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p200-207.

Description of the Application of Goal Programming for Selective Withdrawal Structure Operation, D. G. Fontane and M. L. Schneider, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p400-403.

Developments in Risk Analysis Commercial Software, Charles Yoe, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p243-262.

Earning Empowerment From Stakeholders, Peter T. Johnson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p258-262.

The Economic Cost of Stocking Catchable Rainbow Trout, Donn M. Johnson and Richard G. Walsh, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p549-552.

Environment-Irrigation Trade-Offs and Risks, Norman J. Dudley, (Risk-Based Decision Making in Water Re-sources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p280-294.

Evaluation of Projects for Rehabilitation of Highway Bridges, J. O. Sobanjo, George Stukhart and Ray W. James, ST Jan. 94, p81-99.

Flexible Extracation of Practical Knowledge from Bridge Databases, Yoram Reich, Steven J. Fenves and Eswaran Subrahmanian, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1014-1021.

A Formal Expert Judgment Procedure for Performance Assessments of the Waste Isolation Pilot Plant, Kathleen M. Trauth, Robert V. Guzowski and Stephen C. Hora, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1745A Frame-Based Drawing Management System Based on Building Object Model, Gakuhito Hirasawa and Yusuke Yamazaki, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p555-562.

A Gaming Analysis of Drought-Coping Policy Options, James L. Henderson, William B. Lord and Russell L. Gum, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p620-623.

Global Warming is an Expensive Nonproblem, CE Jan. 94,

p30-31.

Groundwater Management and Systems Operations Optimization Utilizing Supply, Well Reliability, and Demand Distribution as Decision-Making Criteria, Kathlie Suyn Jeng and Jerry Rogers, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Twoil ed. 10904. p. 377.80. N. Tuvel, ed., 1994), p77-80.

Heuristic Algorithms for Aggregating Rail-Surface-Defect Data, Roemer M. Alfelor and Sue McNeil, TE Mar./Apr.

94, p295-311.

The Impact of the Doe Decision Making Process at the Waste Isolation Pilot Plant with Respect to Petroleum Reserves, Matthew Silva, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p1753-1761.

Incorporating Stakeholder Values in Systems Engineering Decision Making, Philip M. Altomare, Michael L. Grygiel and Bernard G. Morais, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1762-1769.

Integration of Water Resource Models and GIS for Water Resource Management, Roger T. Kilgore, Joseph S. Krolak and Michael Walsh, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and

Harry N. Tuvel, ed., 1994), p37-40.

Involving the People: Re-Connecting American Citizens to their Local Government, John R. Henderson, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p377-386.

Judgemental Model of Engineering Management, J. V. Par-kin, ME Jan./Feb. 94, p52-57.

The Law of the Colorado River: Can It Cope With Severe Sustained Drought? Lawrence J. MacDonnell, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p628-631.

Linear Programming for Analysis of Material Recovery Facilities, Jay R. Lund, George Tchobanoglous, Robert P. Anex and Renée A. Lawver, EE Sept./Oct. 94,

A Machine Learning Decision Support System for Collab-orative Design, Nenad Ivezic and James H. Garrett, Jr., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p901-908.

Markovian Models for Bridge Maintenance Management, William T. Scherer and Douglas M. Glagola, TE Jan./

Feb. 94, p37-51.

Multimedia Approach to Case-Based Structural Design, Mary Lou Maher and Bala Balachandran, CP July 94, p359-376.

Neuromodex—Neural Network System for Modular Con-struction Decision Making, Mirza B. Murtaza and Deborah J. Fisher, CP Apr. 94, p221-233.

Opportunities, Constraints and Change in Reservoir Management, William K. Johnson, David T. Ford and Ralph A. Wurbs, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p864-867.

Overflow Elimination Benefits from GIS Based Technology, Rod Thornhill, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p829-835.

Planning and Management of Change, Robert M. Nelson, Jr., C. Thomas Statton and Robin K. St. Clair, (High Level Radioactive Waste Management, High Level Ra-dioactive Waste Program Committee, 1994), p1722-

Prioritizing Transit Markets Using Analytic Hierarchy Process, Snehamay Khasnabis and Bharat B. Chaudhry, TE Jan./Feb. 94, p74-93.

A Process for Integrating Public Involvement Into Technical/Social Programs, Susan Wiltshire and Carol Williams, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p275-279.

Public Participation in Enviornmental Issues in Taiwan, K. K. Li, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p193-200.

Range Estimating -- User-Friendly Risk Analysis, Kevin M. Curran, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p47-54.

Ranking Ground-water Management Alternatives by Multicriterion Analysis, Lucien Duckstein, Wiktor Treichel and Samir El Magnouni, WR July/Aug. 94, p546-565.

Reliability-Based Assessment of Corps Structures, Mary Ann Leggett, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p73-81.

and Eugene L. Stakniv, ed., 1994), p.73-didies, Richard Males, David Moser, Michael Walsh, Walter Grayman and Craig Strus, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p.274-279.

Risk-Based Decision Making in Water Resources VI, ISSN: 1063-5076, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994, 0-7844-

0032-6, 381pp.

Risk-Based Environmental Priorities: What Priority? E. Donald Elliott and Alan B. Horowitz, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p24-33.

Stakeholder Involvement in System Architecture Decisions, Dwight Shelor and Ruane Langton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1609-1613.

Superfund Decision Analysis in Presence of Uncertainty, Aaron A. Jennings, Neel Mehta and Sumeet Mohan, EE

Sept./Oct. 94, p1132-1150.

Treatment of Uncertainty in the NRC Regulatory Process, J. Michael McGarry, III and F. Stanley Echols, (High Level Radioactive Waste Management, High Level Ra-dioactive Waste Program Committee, 1994), p1404-1416.

Uncertain Reasoning in a Pavement Management System, B. N. O. Attoh-Okine, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p326-332.

Uncertainty versus Computer Response Time, William D. Uncertainty versus Computer Response Time, William D. Rowe, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p263-273.
Understanding the Uses of History in Water Resources Planning and Management, Loretta C. Lohman, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p505-508

Using Performance Assessment for Radioactive Waste Disposal Decision Making-Implementation of the Methodposai Decision Making—Implementation of the Method-ology into the Third Performance Assessment Iteration of the Greater Confinement Disposal Site, David P. Gal-legos, Stephen H. Conrad and Thomas A. Baer, (High Level Radioactive Waste Management, High Level Ra-dioactive Waste Program Committee, 1994), p1671-1601

Validation of Knowledge-Based System with Multiple Bridge Rail Experts, Paul N. Roschke, TE Sept./Oct. 94,

p787-806.

Decision support systems

Dectsion support systems

Addressing Central Valley Project Policy Issues Using a
General-Purpose Model, Jean M. Boyer, (Water Policy
and Management: Solving the Problems, Darrell G.
Fontane, ed. and Harry N. Tuvel, ed., 1994), p509-512.

Application of Fuzzy Logic and Neural Networks to Automatically Detect Freeway Traffic Incidents, Chien-Hua Hsiao, Ching-Teng Lin and Michael Cassidy, TE Sept./ Oct. 94, p753-772.

An Artificial Neural Network Approach to Pavement Maintenance Decision Support System, Abdullah M. Alsugair and Essam Sharaf, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p942-949. Colorado River Decision Support System, Larry Brazil and Ross Bethel, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p307-310.

Computing in Civil Engineering, 2 vols... Khozeimeh, ed., 1994, 0-7844-0026-1, 2275pp. vols., Khalil

DBID: Analogy-Based DSS for Bidding in Construction, Osama Moselhi, Tarek Hegazy and Paul Fazio, CO Sept. 93, p466-479.

A Decision Support System for Administering Water Rights in an Alluvial Aquifer, John C. Tracy, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p287-290.

Decision Support System for Conjunctive Use Under Complex Water Right Conditions, Jeffrey W. Fredericks, John W. Labadie and Jon Altenhofen, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p582-587.

A Decision Support System for Evaluating the Suitability a Robotics System for a Construction Project, Makarand Hastak, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p507-514.

A Decision Support System for Multi-Purpose Reservoir Operations, S. B. Shim, H. S. Lee, K. K. Koh, K. D. Shim and D. G. Fontane, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p303-306.

A Decision Support System for Nonpoint Source Pollution Management Using a Distributed Model-GIS-DBMS Linkage, Jaewan Yoon and G. Padmanabhan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

A Decision Support System for Reassessing the Operation of the Chungju Reservoir System, Darrell G. Fontane, Soon Bo Shim and H. S. Lee, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed.

and Harry N. Tuvel, ed., 1994), p299-302. A Decision Support System for the Expansion of Interna-tional Operations of A/E/C Firms, Makarand Hastak, D. W. Halpin and Jorge A. Vanegas, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p735-742.

Decision Support System for Wetland Development at a Landscape Level, Luis A. Garcia, Rolando Vadas, Steffen Meyer, John Ternlund and Jack Cunningham, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

Decision-Support System for Long-Range Stream Flow Forecasting, Michael Bender and Slobodan P. Simono-vic, CP Jan. 94, p20-34.

Design and Implementation of an Optimal Real-Time Hydropower Generation Scheduling System for the Lower Colorado River in Texas, Quentin W. Martin, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p169-172.

Development of Hydro-Scheduling Model for Optimal Joint Operation of Multi-Reservoir Systems, S. B. Shim, J. W. Labadie, H. S. Lee, D. K. Koh and K. D. Shim, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p57-60.

Evaluation of Projects for Rehabilitation of Highway Bridges, J. O. Sobanjo, George Stukhart and Ray W. James, ST Jan. 94, p81-99.

Fuzzy Modus Ponens Deduction Technique for Construc-tion Scheduling, Ricky Wai-Kin Wu and Fabian C. Hadipriono, CO Mar. 94, p162-179.

Geographically Distributed Decision Support; The Tennes-see Valley Authority (TVA) TERRA System, Rene F Reitsma, Peter Ostrowski, Jr. and Stephen C. Wehrend, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p311-314.

Heuristic Knowledge-base Approach to Runoff Estimation in Midwestern States Using a SCS Curve Number Meth-od, Jaewan Yoon and G. Padmanabhan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p410Improving Reservoir System Operations Under Water Rights Requirements, L. E. Brazil, W. Liu, G. N. Day, D. P. Laurine and R. Steger, (Water Policy and Manage-ment: Solving the Problems, Darrell G. Fontane, ed. and

Harry N. Twel, ed., 1994), p588-591.
Intelligent Decision Support System for Stage Discharge
Analysis, Slobodan P. Simonovic, (Water Policy and
Management: Solving the Problems, Darrell G. Fontane,

ed. and Harry N. Tuvel, ed., 1994), p283-286.

Interactive Decision Support System for Building Construction Scheduling, K. E. E. Kähkönen, CP Oct. 94,

p519-535.

A Machine Learning Decision Support System for Collaborative Design, Nenad Ivezic and James H. Garrett, Jr., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p901-908.

A New Automated System for Decision Support in the Construction Industry, M. J. Riley and C. J. Pickering, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p523-530.

Public Involvement in Water Resources Management, James W. Vearil, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N.

Tuvel, ed., 1994), p445-448.

Real-Time Decision-Support System for Freeway Management and Control, Hongjun Zhang and Stephen G. Ritchie, CP Jan. 94, p35-51.

Technologies for Planning Railroad Track Maintenance and Renewal, Donald Uzarski and Sue McNeil, TE Sept./Oct. 94, p807-820.

Uncertain Reasoning in a Pavement Management System, B. N. O. Attoh-Okine, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p326-332.

Water Policy and Management: Solving the Problems, Dar-rell G. Fontane, ed. and Harry N. Tuvel, ed., 1994, 0-7844-0020-2, 900pp.

Decision theory
Alternative Habitat Concepts for the First Lunar Outpost,
Kriss Kennedy and Michael Roberts, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1020-1035.

Habitat Configuration Evaluation Criteria for Moon/Mars,

Kriss J. Kennedy, (Engineering, Construction, and Op-erations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p979-987. Risk-Based Decision Making in Water Resources VI, ISSN: 1063-5076, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994, 0-7844-0032-6, 381pp.

Flat-Plate Repairs Using Innovative Shotcrete Applica-tions, Avanti C. Shroff and Indrajit M. Mehta, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p971-982.

Decomposition

Experimental Verification of Numerical Model for Nonlinear Wave Evolutions, Takumi Ohyama, Serdar Beji, Ka-zuo Nadaoka and Jurjen A. Battjes, WW Nov/Dec. 94, p637-644.

Long Term Stability of Natural Glasses, Vladimír Knobloch and Lumír Nachmilner, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p1066-1068.
On some Problems of the Multicriteria Optimization of the Spatial Grid Structures, Jan A. Karczewski and Witold M. Paczkowski, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p162-171. Performance of Fill that Contains Organic Matter, Robert

W. Day, CF Nov. 94, p264-273.

Recent Assessment and Decontamination Studies of Contaminated Sediments in the New York/New Jersey Harbor, Eric Stern, Joseph Olha, Audrey A. Massa and Bryce Wisemiller, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p458-467.

Thermal Regeneration of Spent Lithium Hydroxide, Ven-katesh Srinivasan and Bernadette Luna, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1036-

1045

Deep foundations

Bearing Capacity of Soils, U.S. Army Corps of Engineers, Department of the Army, 1993, 0-87262-997-X, 145pp.

High-Strain Kinetic Testing of Deep Foundations, Alain E. Holeyman, (Structures Congress XII, N. C. Baker, ed.

and Barry J. Loodno, ed., 1994), p934-939.

Stresses Induced by Surficial and Deep Loading in Elastic Medium, Olivier Rossa and Gabriel Auvinet, GT Aug. 92, p1241-1246.

Deep soil mixing

DSM Saves the Dam, Andrew D. Walker, CE Dec. 94, p48-51.

Deep water

Biological and Physical Characterization of a Deep-Ocean Disposal Site off Northern California, James A. Blake, Catherine A. Courtney, Barbara Hecker, Brigitte Hilbig, Jo Ann Muramoto and Donald C. Rhoads, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p111-120.

Modeling of Deep Water Outfall Plumes in the East Australian Coastal Ocean, Ian P. King, William L. Peirson and Bruce A. Cathers, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson,

ed., 1994), p71-85.

Puckette, Paul, Michael Tubman and Blair Brumley, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p86-95.

Reconstruction of the West Breakwater at Port Sines, Por-tugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, (Orville T. Magoon, chmn.), 1994, 0-7844-0044-X, 443pp.

Sediment Dispersion and Footprint Modeling Initial Char-acterization at a Deep Disposal Site, Albert Mills Soldate, Jr. and Kim A. Brown, (Dredging '94, E. Clark McNair, T., ed., 1994), p103-110.
Wave Height From Deep Water Through Breaking Zone, J.
William Kamphuis, WW July/Aug. 94, p347-367.

Characteristics of the US Highway Bridge Population, Kenneth F. Dunker and Basile G. Rabbat, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994). p1006-1013.

Interpretation of Nondestructive Integrity Tests Using Artificial Neural Networks, Glenn J. Rix, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1346-1351.

NDT Methods for Flaw Detection in Concrete, Nicholas J. Carino, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p175-192.

Wright was Wrong?, CE Jan. 94, p30.

Definitions

Ideal of Civil Engineering, George Bugliarello, El July 94, p290-294.

Unbound Drainable Base Courses: Permeability Versus Unsurfaced Stability, Reed B. Freeman and Gary L. Anderton, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p685-692.

Braced Double Skinned Structure in Lunar Application, Hamid R. Adib-Jahromi, Ramesh B. Malla and Michael A. Accorsi, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p47-56.

Computer Analysis of Continuous P/C Highway Bridge Girders with Variable Depth, Hani Melhem and Weiqun Zhang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p696-703.

Creep Behavior of Structural Timber under Varying Humidity Conditions, Annika Martensson, ST Sept. 94, p2565-2582.

Creep Effects in Composite Beams with Flexible Shear Connectors, Angelo Marcello Tarantino and Luigino Dezi, ST Aug. 92, p2063-2081.

Creep in Composite Continuous Beams. II: Parametric Study, Luigino Dezi and Angelo Marcello Tarantino, ST July 93, p2112-2133.

Cyclic Axial Loading of Drilled Shafts in Cohesive Soil, Kevin J. McManus and Fred H. Kulhawy, GT Sept. 94, p1481-1497.

Deflection Amplification Factor for Seismic Design Provisions, Chia-Ming Uang and Ahmed Maarouf, ST Aug. 94, p2423-2436.

Dynamic Linear Back Calculation of Pavement Material Parameters, Jacob Uzan, TE Jan./Feb. 94, p109-126.

Dynamic Response of Fibre-Reinforced Composite Plates Under Distributed Impact Loads, R. K. Mittal and M. R. Khalili, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p94-109.

Effect of Bolt Slippage on Ultimate Behavior of Lattice Structures, S. Kitipornchai, F. G. A. Al-Bermani and A.

H. Peyrot, ST Aug. 94, p2281-2287.

Effects of Cyclic Lateral Loads on Piles in Sand, J. H. Long and Gheert Vanneste, GT Jan. 94, p225-244.

Estimation of Pavement-Layer Moduli Using Nonlinear Optimization Technique, Mustaque Hossain, John Zaniewski and Subramaniam Rajan, TE May/June 94, p376-393.

Evaluation of Wood Floor Vibration Design Criteria, R. E. Kalkert and J. D. Dolan, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p520-525.

Hybrid Composite Beams: Analytical Modeling, S. A. Bhutta and I. L. Al-Qadi, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p178-190.

Hygrothermal Effects in Composite Sandwich Panels, Charles E. S. Ueng and Jonathan D. Sherrill, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p306-

Large Deflection of Beams under Moment Gradient, S. Chucheepsakul, S. Buncharoen and C. M. Wang, EM Sept. 94, p1848-1860.

Large Deflection of Imperfect Plates by Iterative Be-Fe Method, Jianqiao Ye, EM Mar. 94, p431-444.

Lateral Load Analysis of Groups of Piles and Drilled Shafts, Phillip S. K. Ooi and J. Michael Duncan, GT June 94, p1034-1050.

Load-Carrying Mechanism of Restrained Plates at Large Deflections, Zhiliang Fan, EM June 94, p1388-1391. Long-Term Deflection of RC Beams, W. A. M. Alwis, A.

Olorunniwo and K. K. Ang, ST July 94, p2220-2226. Model Tests on Caissons, Sreenivas Alampalli and Venkatanarayana Peddibotla, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T.

Yeung, ed. and Guy Y. Félio, ed., 1994), p325-336.

New Modulus of Soil Reaction - E' Values for Buried
Thermoplastic Pipe Design, Jey K. Jevapalan and Peggy
A. Jaramillo, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p239-260.

Nonlinear Inelastic Analysis of Steel Beam-Columns II: Applications, Yong Lin Pi and N. S. Trahair, ST July 94, p2062-2085

Overview - Electrical Substation Structures Design Guide, Leon Kempner, Jr., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p597-600.

Parametric Study of Axisymmetric Circular-Glass Plates, C. V. Girija Vallabhan, Y. C. Das and Manjunatha Ramasamudra, ST May 94, p1663-1671.

Response of Stressed Timber T - and Box-Beam Bridges, Hota GangaRao, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p701-706.

Settlement Behavior of an Avalanche Protection Gallery Founded on Loose Sandy Silt, Walter Steiner, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p207-221.

Shock-Wave Reduction by Bottom Drop, Markus Schwalt and Willi H. Hager, HY Oct. 94, p1222-1227.

Structural Evaluation of Airfield Rigid Pavements Using Falling Weight Deflectometer, Boming Tang, TE May/ June 93, p467-476.

Tests on Deep I-Shape Pultruded Beams, A. Zureick and L. F. Kahn, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1572-1577

Time-related Deflections of Cantilever Bridges, Cornelis van der Veen, Marcel van Vliet and Ane de Boer, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p922-929.

Use of Composite Timber-concrete Floors in Residential Buildings, B. H. Ahmadi and M. P. Saka, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p508-513.

Vertical Pavement Strain as Means of Weighing Vehicles, J. G. Marsh and R. J. Jewell, TE July/Aug. 94, p617-632.

Wind Deflection Probability Analysis, Benjamin J. Biller, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p869-874.

The World's Longest Cable-stayed Foot-Bridge Using Fiber Reinforced Plastics, Magdi A. Khalifa and Maher K. Tadros, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p207-214.

Analysis of Arch Dams, Alexander Michael Ansah, ST May 93, p1516-1538.

Analysis of Deep Excavation in Boston, Andrew J. Whittle, Youssef M. A. Hashash and Robert V. Whitman, GT Jan. 93, p69-90.

Automatic, Remote, Multiplexed Geotechnical Measurements with Time Domain Reflectometry (TDR), Charles H. Dowding and Fei-chiu Huang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1220-

Behavior of Foundations Subjected to Large Ground Movements, Richard M. Bennett, Eric C. Drumm and Guoming Lin, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p49-54.

Deformations About Excavations in Highly Stressed Rock, Paul Nash and Garry Mostyn, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1447-1459.

Deformations in Composite Prestressed Concrete Bridge Deck Panels, Robert E. Abendroth, ST Nov. 94, p3223-

Deformations in Granular Soils Due to Cyclic Loading, P. M. Byrne and J. McIntyre, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1864-1896.

Deformations in Sand Layer During Pile Driving, Francis D. Leathers, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p257-268.

Design, Construction and Performance of a Soil Nailed Wall in Puerto Rico, Suang S. Cheng and Lawrence A. Hansen, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p1-16.

Ductility of Concrete-Filled Steel Box Columns under Cy clic Loading, Tsutomu Usami and Hanbin Ge, ST July 94, p2021-2040.

Failures of Residential Building Basements in Ohio, C. F. Diaz, F. C. Hadipriono and S. Pasternack, CF Feb. 94, p65-80.

Foundation Deformation Due to Earthquakes, Ricardo Dobry, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1846-1863.

Hybrid Finite Element/Discrete Element Model for Large Deformation Geotechnical Engineering Problems, Isao Ishibashi, Tarun K. Agarwal and You Wang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p857-864.

Large Deformation Theory Using Truncated Rotations, Daniel A. Miller and Anthony N. Palazotto, (Engineering, Construction, and Operations in Space IV, Rodney Galloway, ed. and Stanley Lokaj, ed., 1994), p137-146

Liquefaction Characteristics of Silts, Sukhmander Singh, (Ground Failures Under Seismic Conditions, Shamsh Prakash, ed. and Panos Dakoulas, ed., 1994), p105-116.

Macroelement Model for Shear Wall Analysis, Jerome M. James and Sashi K. Kunnath, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1505-1512.

Material Nonlinear Analysis of Thin-Walled Beams, A. Prokić, ST Oct. 94, p2840-2852.

Mechanics of Growing Deformable Solids: A Review, Vyacheslav E. Naumov, EM Feb. 94, p207-220.

Modified Asphalt Binders - How Do They Compare? Ran-dy C. Ahlrich and Gary L. Anderton, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p64-74.

Nonlinear Finite Deformation Analysis of Beams and Columns, Ronald Y. S. Pak and Eric J. Stauffer, EM Oct. 94,

p2136-2153 Numerical Modeling of Initial Ground Movement in an In-

strumented Superconducting Super Collider Shaft, David B. Spires, Fei Duan and Marek Mrugala, (Com-puting in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1990-1996.

Permanent Deformation on Preexisting Sliding Surfaces in Dams, George Gazetas and Nasim Uddin, GT Nov. 94, p2041-2061

Prediction of Ground Deformations Due to Excavation-Application to Tunnel Lining Design in Weak Rock, Wern-ping Chen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1997-2005.

Prediction of Vertical Load on Spread Foundations at Small and large Deflections, Richard J. Deschamps and Scott J. Ludlow, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p202-205.

Serviceability of Earth Retaining Structures, Geotechnical Special Publication No. 42, Richard J. Finno, ed., 1994,

0-7844-0051-2, 160pp.

Settlement Behavior of an Avalanche Protection Gallery Founded on Loose Sandy Silt, Walter Steiner, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p207-221.

Shaft Performance in Taylor Marl-Field Measurements vs. Numerical Modeling, David B. Spires, Fei Duan and Marek Mrugala, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p779-784.

Shakedown Analysis of Hollow Spheres, Wei Jiang, EM July 94, p1447-1480.

Shear Effects on the Static Behaviour of Stiffened Pierced Walls, B. S. Choo and G. Q. Li, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1719-1726.

Spread Footing Predictions, Kuo-Hsia Chang, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p157-159.

Steady-State Analysis of Buckle Propagation, André Nogueira and John L. Tassoulas, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1514-1519.

Structural System Changes by Means of Forcedly Applied Restraints, Angelo Marcello Tarantino, EM Feb. 94, p392-399.

The Use of Crumb Rubber Modifier in Hot-Mix Asphalt, Mark S. Buncher and E. R. Brown, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p53-63.

Variables Affecting Cyclic Behavior of Reinforcing Steel, J. I. Restrepo-Posada, L. L. Dodd, R. Park and N. Cooke, ST Nov. 94, p3178-3196.

Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994, 0-7844-0027-X, 1940pp.

Deformation analysis
Behavior of AC-20P Versus AC-30 Asphalt Concrete Mixtures, Peter Sebaaly, Imran Farooq and Jon Epps, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1059-1079.

Large Deformation Analysis of Plates on Unilateral Elastic Foundation, A. A. Khathlan, EM Aug. 94, p1820-1827.

Postearthquake Deformation Analysis of Wildlife Site, W. H. Gu, N. R. Morgenstern and P. K. Robertson, GT Feb. 94, p274-289.

Degradation

Clean Water is not Enough, James R. Karr, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p79-95.

Damage Mechanisms and Influence of Gradation for Steep Riprap, Karol Rohan, Mahrez Ben Belfadhel, Oscar Dascal and Guy Lefebvre, GT Mar. 94, p514-527.

Degradation of Acetate, Propionate, and Butyrate under Shock Temperature, Mustafa Öztürk, EE Mar./Apr. 93, p321-331.

Innovative Treatment of Soil Contamination: Radiolytic Destruction of Dioxin and Co-Contaminants by Cobalt-60, Roger J. Hilarides and Kimberly A. Gray, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p733-736.

Kinetics of Toluene Degradation by Denitrifying Aquifer Microorganisms, Pedro J. J. Alvarez, Paul J. Anid and Timothy M. Vogel, EE Sept./Oct. 94, p1327-1336.

Photocatalytic Transformations and Degradation of 2.4.6-trinitrotoluene (TNT) in TiO2 Slurries, Daniel C. Schmelling and Kimberly A. Gray, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p751-755.

Progress in Understanding the Structure and Thermodynamics of Calcium Silicate Hydrates, Annemarie Meike, Maria Onofrei, Carol J. Bruton and Brian E. Viani, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2590-2596.

The Sensitized Photocatalysis of a Mixed Reactant System of 4-Chlorophenol and 4-Nitrophenol, Melissa S. Dieckmann, Kimberly A. Gray and Prashant V. Kamat, Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p726–732.

Degrees of freedom

Effects of Site Conditions of Earthquake-Resistant Design of Structures, Vitelmo V. Bertero and Eduardo Miranda, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p561-566.

Energy Method for Nonlinear Random Vibrations in MDF Systems, Long Yun Jia, EM Apr. 94, p910-916.

Energy-Based Dynamic Analysis of Secondary Systems, Genda Chen and T. T. Soong, EM Mar. 94, p514-534.

Human Extender: A Material Handling System, H. Kazerooni, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p37-43.

Seismic Hazard Analysis of Nonlinear Structures. I: Methodology, Paolo Bazzurro and C. Allin Cornell, ST Nov. 94, p3320-3344.

Seismic Hazard Analysis of Nonlinear Structures. II: Applications, Paolo Bazzurro and C. Allin Cornell, ST Nov. 94, p3345-3365.

Deicin

Deicing Denver, David S. Backer, Don Smith and Craig E. Habben, CE July 94, p56-59.

Environment-Friendly Deicing/Anti-Icing Fluid, Len Haslim and John Zuk. (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p137-139.

Delaminating

Cyclic Testing of Pultruded Fiber-Reinforced Plastic Beam-Column Rigid Connection, Michel Bruneau and David Walker, ST Sept. 94, p2637-2652.

Late Stage Damage in G30-500/PMR-15 Laminates, Wieslaw K. Binienda, Anping Hong, Andrew Gyekenyesi and John Hemann, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p316-325.

Rigid Pavement Rehabilitation at the San Marcos Municipal Airport, San Marcos, Texas, Franklin Hines and David Pickett, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p531-538.

Snap Buckling of a Delaminated Layer in a Composite Cylinder, Wan-Lee Yin, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p156-165.

Delaware

Assessing the Impact of Channel Deepening in Delaware Bay Through Numerical Modeling, K. W. Kim, B. H. Johnson and J. Gebert, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p29-41.

Dredging Impacts on Delaware Estuary Tides, Joseph L. DiLorenzo, Poshu Huang, M. Llewellyn Thatcher and Tavit O. Najarian, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p86-104.

Identification of A Field Data Collection Program in Delaware Bay, B. H. Johnson, K. W. Kim, T. L. Fagerberg and H. A. Benson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p900-904.

Pipes, Not Penetrations, Keep Leachate Moving, CE June 94, p19.

Validation of a Continental-Scale Storm Surge Model for the Coast of Delaware, David J. Mark and Norman W. Scheffner, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p.249-263.

Verification of a Three-Dimensional Model of Delaware Bay, K. W. Kim, B. H. Johnson and J. Gebert, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p574-578.

Delay time

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The Channel Tunnel: Larger Than Life, and Late, Virginia Fairweather, CE May 94, p42-46.

Construction Claims and Disputes: Causes and Cost/Time Overruns, Cheryl Semple, Francis T. Hartman and George Jergeas, CO Dec. 94, p785-795.

Contemporaneous Development of Field Data: Transportation Construction Claim Defense, Kenneth H. Dunne and George Navarrete, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2124-2135.

Dredging in 3D - Delays, Damages and Disputes, Frank McDonough, Patrick A. McGeehin and Steven Kmieciak, (*Dredging* '94, E. Clark McNair, Jr., ed., 1994), p1305-1314.

Facilitate Delay Claim Analysis with As-Built Schedule Databases, John R. Knoke and Gary H. Jentzen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2104-2111.

SCHEREC: SCHedule RECovery System, Feniosky Pěna, Robert Logcher, Naoto Mine and Timothy McManus, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p17-24.

Deliver

Design/Build Prequalification System, Kevin J. Potter and Victor Sanvido, ME Mar./Apr. 94, p48-56.

Prediction of Sediment Yield, U. C. Kothyari, A. K. Tiwari and Ranvir Singh, IR Nov./Dec. 94, p1122-1131.

Delta

Discharge-Frequency Relationships in Distributary Flow Systems, Edward R. Mifflin, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1085-1089.

Experimental Field Investigations of Small Delta Formation, Maria Mikhailova, (*Coastal Dynamics '94*, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p175-188.

Demand

Demand/Supply Relationship in Transportation Network Design Problems: A Genetic Algorithm Approach, Yihua Xiong and Jerry B. Schneider, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p938-941

Green Pastures, WP Special issue 94, p4.

Optimal Supply of Parking at Airports, Massoud Javid and Prianka N. Seneviratne, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p174-182.

Potential demand for passenger travel to orbit, Patrick Collins, Yoichi Iwasaki, Hideki Kanayama and Misuzu Okazaki, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p578-586. Demographic projections

1993 Recreational Vehicle (RV) Park Census in Beatty and Pahrump, Nevada, Lloyd E. Levy and Marcia D. Housel, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p48-55.

Population Estimation Techniques for Routing Analysis, Shashi K. Sathisan and Anil K. Chagari, (High Level Ra-dioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p658-665

Testing the Spatial Neutrality of the REMI Net Migration Equation, Charles F. Barr, Nasser Daneshvary, Thomas A. Perrigo and Dan S. Rickman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p40-47.

"A Comparison of Characteristics and Economic Expenditures of Boat Show Patrons At Two Types of Boat Shows", Mary H. Bielen, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p248-256.

Demolition

Ground Motions and Air-Blast Effects of Explosive Demolition of Structures, Charles H. Dowding, CO Dec. 94,

Properties of Soundless Chemical Demolition Agents, Jimmie Hinze and James Brown, CO Dec. 94, p816-827.

Denitrification

Biological Upflow Fluidized Bed Denitrification Reactor Demonstration Project-Stamford, Ct. Jeannette Sermon, Thomas Sadick, Dennis Palumbo, Richard Schede, Marylee Santoro, Marvin Schneider and Steven Lesando, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994). p428-435.

Denitrification Inhibition by High Nitrate Wastes, W. Vey dovec, J. Silverstein, N. E. Cook, Jr., L. A. Figueroa, R. Hund and G. D. Lehmkuhl, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p415-422.

Kinetics of Toluene Degradation by Denitrifying Aquifer Microorganisms, Pedro J. J. Alvarez, Paul J. Anid and Timothy M. Vogel, EE Sept./Oct. 94, p1327-1336.

Densification

Blast Densification of a Thick, Loose Debris Flow at Mt. St. Helen's., Washington, Joseph E. Hachey, Robert L. Plum, R. John Byrne, Alan P. Kilian and David V. Jenkins, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p502-512.

Densification of Asphalt Pavements by Traffic, Charles R. Foster, Airport Pavement Innovations—Theory to Practice, Jim W. Hall, Jr., ed., 1993), p164-180.

Dynamic Compaction of Loose Granular Soils: Effect of Print Spacing, Y. K. Chow, D. M. Yong, K. Y. Yong and S. L. Lee, GT July 94, p1115-1133.

Harry Seed, Liquefaction & the Gravel Drain, Choule J. Sonu, Hiroshi Oishi and Katsuhiko Ito, CE Dec. 93, p58-60.

In-Situ Deep Soil Improvement, Geotechnical Special Publication No. 45, Kyle M. Rollins, ed., 1994, 0-7844-0058-X, 150pp.

New Directions for Cement-Based Materials, J. Francis Young, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p610-611.

Comparison of Nuclear and Core Pavement Density Measurements, Steve R. Sanders, Debasis Rath and Frazier Parker, Jr., TE Nov./Dec. 94, p953-966.

Density-dependent Circulation in Desert-basin Aquifers with Isotropic Self-Similar Permeability Distributions, Gilberto E. Urroz and Daoqiong Yang, (Hydraulic Engineering '94', George V. Cotroneo, ed. and Ralph R. Ru-mer, ed., 1994), p87-91.

Improvement of Flow in Final Settling Tanks, Ulrich Bretscher, Peter Krebs and Willi H. Hager, EE May/June

92, p307-321.

Penetration Resistance Value along Compaction Curves, Alain G. Faure and José D. Viana Da Mata, GT Jan. 94.

Uncertainty Analysis of Dredge Production with Correlation, Said M. Easa, WW Sept./Oct. 94, p499-507.

Density currents

Short Circuiting and Density Interface in Primary Clarifiers, Siping Zhou, J. A. McCorquodale and A. M. Godo, HY Sept. 94, p1060-1080.

Density measurement

Alabama DOT Implementation of Hot Mix Asphalt QC/QA Procedures, Frazier Parker, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994),

Banks, Glynn E. Michael P. Alexander and Allen Teeter, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p304-

Density stratification

Modeling of Rectangular Settling Tanks, Siping Zhou and John A. McCorquodale, HY Oct. 92, p1391-1405.

Does Reentrainment Occur During Cohesive Sediment Set-tling? Y. L. Lau and B. G. Krishnappan, HY Feb. 94, p236-244.

Erosion and Deposition by Debris Flows in Mountainous Channels on North Fork Mountain, Eastern West Virginia, Daniel A. Cenderelli and J. Steven Kite, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p772-776.

Fine-Grained Sediment Transport in Pawtuxet River, Rhode Island, C. Kirk Ziegler and Bradley Nisbet, HY

May 94, p561-576.

Long-Term Simulation of Decreased Acid Loading on Forested Watershed, Todd H. Rees and Jerald L. Schnoor, EE Mar./Apr. 94, p291-312.

Need for New Standards to Prevent Deposition in Waste-water Sewers, Chandra Nalluri and Wojciech Da-browski, EE Sept./Oct. 94, p1032-1043.

Source-Receptor Modeling of PAHs Using Deposition Levels in Winter-Long Urban Snowpack, M. Sharma, E. McBean, N. Thomson and J. Marsalek, EE Sept./Oct. 94, p1248-1265.

Depth

Assessing the Impact of Channel Deepening in Delaware Bay Through Numerical Modeling, K. W. Kim, B. H. Johnson and J. Gebert, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p29-41.

Bridge Pier Scour Equations - An Assessment, Alimul Qadar and Sarfaraz A. Ansari, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p61-67.

Depth-Averaged Flow Model in Curvilinear Coordinates, Hector R. Bravo, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p517-521.

Dredging Impacts on Delaware Estuary Tides, Joseph L. DiLorenzo, Poshu Huang, M. Llewellyn Thatcher and Tavit O. Najarian, (Estuar, in: Leweityn Inatcher and Tavit O. Najarian, (Estuar, in: Leweityn Inatcher and Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p86-104.

Need for New Standards to Prevent Deposition in Wastewater Sewers, Chandra Nalluri and Wojciech Da-

browski, EE Sept./Oct. 94, p1032-1043.

Normal-Depth Equations for Irrigation Canals, Prabhata K. Swamee, IR Sept./Oct. 94, p942-948.

Ultimate Depth of Scour Around Bridge Piers, Sarfaraz A. Ansari and Alimul Qadar, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p51-55.

Brackish Groundwater and Urban Runoff: Source of Sup-ply or Source of Problems? William R. Everest and Richard A. Reynolds, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p770-773.

Colloidal Fouling of Reverse Osmosis Membranes, Menachem Elimelech and Xiaohua Zhu, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p329-335.

Goal Programming Model for Distributing and Blending Desalinized Water, Abdulaziz S. Alidi and Taqi N. Al-Faraj, WR May/June 94, p267-275.

Deserts

The Case for Southern Nevada's Thirst, G. C. K. Grinnell, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

Characterization of a Desert Soil Sequence at Yucca Mountian, NV, William R. Guertal, Alan L. Flint, Lon L. Hofmann and David B. Hudson, (High Level Radioactive Waste Management, High Level Radioactive Waste

Program Committee, 1994), p2755-2763.

Problems with Indirect Determinations oblems with Indirect Determinations of Peak Streamflows in Steep, Desert Stream Channels, Patrick A. Glancy and Rhea P. Williams, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p635-639.

Compacted Clay Liners and Covers for Arid Sites, David E. Daniel and Yung-Kwang Wu, GT Feb. 93, p223-237.

Crack Depths in Drying Clays Using Fracture Mechanics, Peter H. Morris, James Graham and David J. Williams, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p40-53.

Liquid Infiltration Through the Boiling-Point Isotherm in a Desiccating Fractured Rock Matrix, O. M. Phillips, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

The Mechanics of Cracking in Embankment Dams, James R. Talbot, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p118-131.

100 Years of Data Not Enough (ltr), CE Aug. 94, p31-32. Allowable Design Loads for Marman Clamp Systems, Robert DiTolla and Michael Ernst, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p217-226.

Alternative Habitat Concepts for the First Lunar Outpost, Kriss Kennedy and Michael Roberts, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1020-1035.

Analyses of Releases Due to Drilling at the Potential Yucca Mountain Repository, R. W. Barnard, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1292-1297.

Analysis and Design of Sprinkler Irrigation Laterals, Helmi M. Hathoot, Hussein M. Abo-Ghobar, Ahmed I. Al-Amoud and Fawzi S. Mohammad, IR May/June 94, p534-549.

p334-349.
Analysis of Levee Design in a Mountain River Using Two-Dimensional Flow Modeling, Diane M. L. Mas, Andrew J. Miller, James A. Smith and Wei-hao Chung, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p757-761.
Application of Numerical Models in the Design of Clarifiers, J. A. McCorquodale and S. P. Zhou, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan ed. and Mare Edwards ed. 1994, p186-19

Ryan, ed. and Mare Edwards, ed., 1994), p186-193.

Application of Structural Optimization, M. Z. Cohn and A. S. Dinovitzer, ST Feb. 94, p617-650.

The Application of Thermal Rock Bolts in the Thermal Design of a Nuclear Waste Repository, George Danko, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p890-898

Approximate Formulas for Effective Length of Steel Columns, A. Gordon Smyrell, ST Sept. 94, p2793-2801.

Architecture and Lightweight Structures: A Methodical Design Approach, Vinzenz Sedlak, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1010-1023.

ASCE GUIDE for Design of Guyed Transmission Structures, Alain H. Peyrot, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p613-617.

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Baker, ed. and Barry J. Loodno, ed., 1994), p613-617.
Assembly of Simulation Networks Using Designs, Plans, and Methods, I. D. Tommelein, R. I. Carr and A. M. Odeh, CO Dec. 94, p796-815.
Assessing Roughing Filtration Design Variables, Jennifer O. Cole, Catherine Westersund and M. Robin Collins, (Critical Issues in Water and Wastewater Treatment, Journal of the Proceedings o seph N. Ryan, ed. and Mare Edwards, ed., 1994), p170-

Assessment of Rock Bolt Systems for Underground Waste Storage, Wesley T. Leedy and Robert J. Watters, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p691-695.

ATLSS Connections with Moment Capacity, Richard B. Garlock, Le-Wu Lu and B. Vincent Viscomi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p743-748.

An Auxiliary Ventilation Design Approach for the ESF Development at Yucca Mountain, P. Mousset-Jones and F. Calizaya, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p508-514.

Bar Yield Penetration in Monotonically Loaded An-chorages, John F. Bonacci, ST Mar. 94, p965-986.

Bechtel Automated Lift Planning System, Craig Bennett and Steve Ditlinger, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p401-409.

Behavior of Hydraulic Jump Basins, Boualem Hadjerioua, Emmett M. Laursen and Margaret S. Petersen, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p416-420.

Behavior of Pressure Tunnels and Guidelines for Liner Design, Gabriel Fernández, GT Oct. 94, p1768-1791.

The Behaviour and Design of Stressed-Arch (Strarch) Frames, Murray J. Clarke and Gregory J. Hancock, (Spa-tial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p200-209.

Bridge Fabrication Error Solution: Developing a Knowledge-Based Expert System for a State Department of Transportation, W. M. Kim Roddis and Michael R. Hess, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1687-1694.

Bridge Pier Scour Equations - An Assessment, Alimul Qadar and Sarfaraz A. Ansari, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p61-67.

Bridge Pier Scour with Debris Accumulation, Bruce W. Melville and D. M. Dongol, HY Sept. 92, p1306-1310.

Bridge Rail Impact Forcing Functions, Barry T. Rosson and Ronald K. Faller, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p91-96.

Calibration of Current Factors in LRFD for Steel, David V. Rosowsky, Ahmed F. Hassan and N. V. V. Phani Kumar, ST Sept. 94, p2737-2746.

Can Long Term Criteria for Deep Disposal be Implemented, K. Bragg, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1397-1403.

The Canadian Approach in the Design of Wood Structures: Conversion to Limit States Design, Dominique P. Janssens, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p514-519.

Capturing As-built Project Information for Facility Man Azement, L. Y. Liu, A. L. Stumpf, S. S. Kim and F. M. Zbinden, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p614-621.

The Case for Retrievable High-Level Nuclear Waste Disposal, Eugene H. Roseboom, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1774-1781.

Case-Based Preliminary Building Design, Simon F. Bailey and Ian F. C. Smith, CP Oct. 94, p454-468.

Circle Integration, John Kunz, Mark Clayton and Martin Fischer, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p55-62.

Civil Engineering and Civic Monuments: The Commissioning, Design and Public Perception of Urban Infra-structure Projects, Anthony C. Webster, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1244-1249.

Civilian Structures: Taking the Defensive, Paul Wei-dlinger, CE Nov. 94, p48-50.

Codification of Wind-Pressure Coefficients for Multispan Gable Roofs, Theodore Stathopoulos and Patrick Saathoff, ST Aug. 94, p2495-2519.

Collaboration in the Engineering Classroom, Patricia G. Frantz, Gregory C. Frantz and John T. DeWolf, El July

93, p297-303.

Column and Beam-Column Design - A World View, N. E. Shanmugam and W. F. Chen, (Structures Congress XII, Baker, ed. and Barry J. Loodno, ed., 1994), p1581-1586.

Column Design in Steel Frames under Gravity Loads, Oscar de Buen, ST Oct. 92, p2928-2935.

Comparing Two OODBMSs: An Application Developer's Perspective, Nancy K. Wiegand and Teresa M. Adams, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1412-1418.

Comparison of Headcut Advance Testing and Soil Test Results, Gregory J. Hanson and Robinson. Kerry M., (Hy-

draulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p426-430. Compliance with NRC Subsystem Requirements in the Re-pository Licensing Process, Homi Minwalla, (High Level

pository Licensing Process, rollin Minhama, (1719) Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1578-1584.

Comprehensive Reliability Analysis of Prestressed Concrete Beams, A. S. Al-Harthy and D. M. Frangopol, (Structures Congress XII, N. C. Baker, ed. and Barry J. Legelsed, 1994), p. 122-123. Loodno, ed., 1994), p193-198.

Computer Calculations Speed Tunnel-Lining Design, Gerhard Sauer, Vojtech Gall and Erich Bauer, CE June 94, p46-49.

The Computer is Not the Problem (ltr), CE May 94, p32-

Computer Model for Infiltration System Design, Thomas N. Debo, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p241-248.

Computer-Based Advisors for Environmentally Conscious "Green" Product Design, Antonio Diaz-Calderon, Steven Fenves, James Garrett and Chris Hendrickson, (Comput-

ing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1497-1504. Conceptual Design and Characteristics of A Dual-Arm Cam-Lock Manipulator, Ali Meghdari, (Robotics for

Challenging Environments, Laura A. Demsetz, ed. and

Paul R. Klarer, ed., 1994), p140-148. Conceptual Design Using Evolutive-Cognitive Computing Techniques, Donald E. Grierson, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2183-2190.

A Conceptual Study of A Solar Power Satellite Using Centrifugal Force, Hiroshi Yamakawa, Hiroshi Kanamori, Kenji Nozaki, Takeo Oura, Takanori Sato, Hisahito Tadokoro, Kenji Takagi, Hiroshi Ueno, Koji Oishi, Haruyuki Namba and Shinji Matsumoto, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p57-63.

Concrete Watertight Structures and Hazardous Liquid Containment, Robert Hengst, 1994, 0-87262-791-8,

150pp.

Confining Reinforcement for Concrete Columns, S. Watson, F. A. Zahn and R. Park, ST June 94, p1798-1824.

Conflict Management Using SHARED-DRIMS, Feniosky Peña-Mora, Duvvuru Sriram and Robert Logcher, (Com puting in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1599-1606.

Considering Uncertainties in Water Resource Designs, Yeou-Koung Tung, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p457-460.

Management Distributed Configurations, Sanjai Tiwari and H. C. Howard, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1607-1614.

Construction of a Lunar Base, Dave Torres, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p799-803.

Construction of the Baytown Bridge, Houston, Man-Chung Tang, (Structures Congress XII, N. C. Baker, ed.

and Barry J. Loodno, ed., 1994), p666-671.

Construction of the Clark Cable-Stayed Bridge at Alton, Illinois, David Goodyear and Ralph Salamie, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p672-676.

Contracting for Tiedback Walls on a Design-Build Basis, Hubert J. Deaton, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p17-23.

Creative Design Using a Genetic Algorithm, Mary Lou Maher, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p2014-2021.

Cut and Cover Construction of the SSC Injector Tunnels, Mahendra P. Yajnik and Wayne Q. Hudler, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p749-754.

Debating Steel - Connection Design, Alexander Newman, CE Feb. 94, p52-55.

Deep Dig, Tight Squeeze, Joseph C. Clougherty, Richard F. O'Brien and Mark W. Pelletier, CE Aug. 94, p42-45.

Demand/Supply Relationship in Transportation Network Design Problems: A Genetic Algorithm Approach, Yihua Xiong and Jerry B. Schneider, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p938-

Deployable Mesh Reflector, Z. You and S. Pellegrino, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p103-112.

Design & Construction of the Liberty Street Bridge Earth Support System, David R. Chapman, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p112-129.

Design and Construction of Post-Tensioned Concrete Floor Systems, D. Kirk Harman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1403-

Design and Implementation of a Database for Seismic Evaluation of Structures, Steven E. Rahmann and Gres ory L. Fenves, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p790-797.

Design and Implementation of an Optimal Real-Time Hydropower Generation Scheduling System for the Lower Colorado River in Texas, Quentin W. Martin, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p169-

Design and Operation of a System to Monitor Sediment Deposition for Protection of an Endangered Mussel, Michael S. Griffin and David S. Mueller, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p472-481.

Design and Technological Opportunities at Waterparks: The Hyland Hills' Water World Experience, Terry R. Barnhart, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p83-92.

Design and Testing of the NDBC Wave Processing Mod-ule, Joel N. Chaffin, William Bell, Kathleen O'Neil and Chung-Chu Teng, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p277-286.

Design Basis Spent Nuclear Fuel Characteristics, Peter Gottlieb and J. Kevin McCoy, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p845-851.

Design Considerations for Night Storage in Irrigation Systems, Wadie F. Mankarious, (Water Policy and Manage-ment: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p331-334.

Design Guidelines for the Use of Debonded Strands, Bruce Russell and Ned H. Burns, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p618-

- Design of a Network and Travel Simulator: A Tool Box for the Analysis of Route Choice Behavior in the Presence of Information, Kenneth M. Vaughn, Prasuna Reddy, Ryuichi Kitamura, Paul P. Jovanis and Mohamed A. Abdel-Aty. (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1743-1750.
- The Design of a Proactive Cost Feedback System for Construction Project Management, David N. Ford and Feniosky Pena, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1365-1372.
- Design of an In-Situ Directional Wave Gage for One Year Deployments, Gary L. Howell, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p264-276.
- Design of Cantilever Steel Beams: Refined Approach, Hesham S. Essa and D. J. Laurie Kennedy, ST Sept. 94, p2623-2636.
- Design of Clay Liner Permeability at Laboratory Scale Using Expert Systems, Imad A. Basheer, Wissam A. Naouss and Lakshmi N. Reddi, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p273-276.
- Design of Fluidizer Systems for Coastal Environment, Richard N. Weisman and Gerard P. Lennon, WW Sept./ Oct. 94, p468-487.
- Design of Frames Using Notional Horizontal Force, S. Toma, J. Takamatsu and N. Nishihata, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1161-1166.
- Design of Half-Through or "Pony" Truss Bridges Using Square or Rectangular Hollow Structural Sections, Steven J. Herth, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p210-220.
- Design of Landfill Leachate-Collection Filters, George R. Koerner, Robert M. Koerner and Joseph P. Martin, GT Oct. 94, p1792-1803.
- Design of Lateral Steel in Columns, Shamim A. Sheikh and Murat Saatcioglu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p432-437.
- Design of Manning's-Rougness-Coefficient Study in New York State, William F. Coon, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p677-681.
- Design of Prestressed Hollow Core Slabs with Reference to Web Shear Failure, Lin Yang, ST Sept. 94, p2675-2696.
- Design Relationship for Filters in Bed Protection, K. J. Bakker, H. J. Verheij and M. B. de Groot, HY Sept. 94, p1082-1088.
- Design Techniques for Rectangular Lunar Modules, Mark E. Schroeder, Philip J. Richter and Jim Day, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p176-185.
- Design, Construction and Performance of a Soil Nailed Wall in Puerto Rico, Suang S. Cheng and Lawrence A. Hansen, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), pl-16.
- Design, Construction, and Maintenance of Relief Wells, US Army Corps of Engineers, 1993, 0-87262-955-4, 90pp.
- Design—Cornerstone of Your Career: Advice for Young Engineers, Rodney Attwood, El July 94, p241-245.
- Designing Under Uncertainty When We Can Reduce Uncertainty: When is Another Observation Worth the Cost? J. Wayland Eheart, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), 461-464.
- Determination of Sediment Profile for a Dry Flood Control Basin, Rebecca J. Stonestreet and Scott E. Stonestreet, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1004-1008.
- Developing Standardized Connection Analysis Techniques for Slim Hole Core Rod Designs, Gregory Fehr and Edmond I. Balley, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1048-1054

- Development of a High Resolution Spectrometer for Measuring the Near-Earth RFI Environment: The First Auto-Correlator in Space, Namir E. Kassim, Kurt W. Weiler and Andrew W. Clegg, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1410-1421.
- Development of a Knowledge-Based System for Sanitary Landfill Design, H. Basri and E. I. Stentiford, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1257-1264.
- The Development of a Packaging Handbook, L. B. Shappert, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1237-1241.
- Development of a Partial Gravity Lunar Airlock, David John Gutierrez, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p227-236.
- Doe's Topical Report on a Methodology to Assess Vibratory Ground Motion and Fault Displacement Hazards at the Yucca Mountain Site, David F. Fenster and Richard C. Quittmeyer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2260-2265.
- Drivetrain Design, Incorporating Redundancy, for an Autonomous Walking Robot, Gerald P. Roston and Kevin Dowling, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p184-192.
- Dwell-Time Effects of Low-Floor Bus Design, Jonathan C. Levine and Gwo-Wei Torng, TE Nov./Dec. 94, p914-929.
- Dynamic Optimization by Small Variation of the System Layout, Zdzisław A. Parszewski, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1492-1503.
- Elasto-Plastic Buckling Design for Shallow Cylindrical Shells under External Pressure, Seishi Yamada and James G. A. Croll, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p936-945.
- Erectable Truss Hardware for Large Space Structures, Raymond E. Dick, Terry N. Faddis and Bill G. Barr, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p414-422.
- Estimating Ground Snow Loads Using Local Climatological Data, Kenneth J. Fridley, Kathy A. Roberts and J. Bryan Mitchell, ST Dec. 94, p3567-3576.
- Estimation of Spillway Free Jet Trajectory Lengths, Peter J. Rae and Diana Hurdowar-Castro, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p421-425.
- Evaluations and Revisions of the Design, F. Abecasis and C. Pita, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p302-326.
- The Evolution of Breakwater Design, Billy L. Edge, Orville T. Magoon and William F. Baird, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p1024-1039.
- Evolutionary Methods for Synthesis of Truss Topology, Fang Zhao, Sushil J. Louis and Mihaly Lenart, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1816-1823.
- Excavation Damage and Organic Growth in a 1.2m Diameter Borehole, R. A. Everitt, D. A. Brown, D.M. Boychuk and P. Gann, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2092-2100.
- Experience is Not Bettering Pavement Designs (ltr), CE6-94, CE June 94, p35-36.
- Experimental Design and Measurement Techniques for Investigation of Two-Phase Flow, Andreas J. Kuck, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p86-93.

Exploratory Studies Facility and Potential Repository Term, J. D. Smith, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p549-553.

Exploratory Studies Facility Test Implementation and Integration with Construction and Design, Deirdre M. Boak, Ned Z. Elkins, Richard Kovach and Ronald D. Oliver, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1770-1773.

Externally Stiffened I-Beam to Box-Column Connections, N. E. Shanmugam, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p719-724.

Fabrication and Testing of High Strength, High Capacity, Weight Optimized Trailers, Chad Taylor, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p931-933.

Failure as Source of Engineering Judgment: Case of John Roebling, Henry Petroski, CF Feb. 93, p46-58. Federal Design Competition Opens Fourth Round, CE

Sept. 94, p76.

Final Storage of High Activity Waste in Spain, Aurelio Uli-barri, Fernando Huertas and Jesús Alonso, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p538-548. Finite Element Analysis of Shear in RC Girders, Pascal

Casanova, Merret Fliedner, Pierre Rossi and Franz-Josef Ulm, (Analysis and Computation, Franklin Y. Cheng,

ed., 1994), p223-229.

The First Multipurpose Spent Fuel Container Reviewed by the U.S. Nuclear Regulatory Commission (USNRC), Ivan F. Stuart, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p467-476.

A Fish Bypass Screen at Puntledge Project, Herbert Louie, John Taylor and Larry J. Swenson, (Hydraulic Engineer-ing '94, George V. Cotroneo, ed. and Ralph R. Rumer,

ng 94, George V. Corroneo, ed. and Raiph R. Rumer, ed., 1994), p442-446. Flat Plates with Regular and Irregular Column Layouts.I: Analysis, Kolbjorn Saether, ST May 94, p1563-1579.

Flat Plates with Regular and Irregular Column Layouts.II: Numerical Evaluations, Kolbjorn Saether, ST May 94,

For Successful Design-Build, Onus is on the Owner (ltr), CE Aug. 94, p32-33.

A Formal Product/Process Model for Engineering, Albert

Wong and D. Sriram, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1481-1488. Foundation Slab for Lunar Base Construction, Mikiya Okumura, Yasuhiro Ohashi, Takao Ueno, Shojiro Motoyui and Kiosuke Murakawa, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1128-1137.

Framework and Status of the ASCE Parks & Recreation Planning Guide, Marshall Flug, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p187-195.

A Framework for Collaborative Distributed Facility Engineering, Taha Khedro, Michael R. Genesereth and Paul M. Teicholz, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1489-1496.

Functional Analysis Using Partitioned Engineering Data Flow Model, D. H. Douglas Phan and H. Craig Howard,

CP Jan. 94, p2-19.

Further Development of a Source Term Model for a Repos-itory in Unsaturated Tuff, Richard Codell and Richard Weller, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p477-484. GLG Grand, Atlanta Design and Construction, Martin R. Ocon, (Structures Congress XII, N. C. Baker, ed. and

Barry J. Loodno, ed., 1994), p25-30.

Green-Ampt Analysis of Wetting Patterns for Surface Emitters, Shu-Tung Chu, IR Mar./Apr. 94, p414-421.

Guide for the Design of Prestressed Concrete Poles, William Y. Ford, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p591-596. Habitat Configuration Evaluation Criteria for Moon/Mars,

Kriss J. Kennedy, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p979-987.

A Health Risk Based Approach for HLW Repository Envi-ronmental Protection Criteria, R. F. Williams, R. L. Yang, R. McGuire and R. E. Wilems, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1435-1450.

Heavy Metal Removal Using Peat/Wetland Treatment, Suzanne Murawski, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p408-414.

Hexagonal Prison, The Shape of Things to Come, CE June 94, p12.

Horizontally Curved Steel Bridge Research-Update 2, S. R. Duwadi, J. M. Yadlosky and C. H. Yoo, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1071-1076.

How Tall Transmission Poles Survived Hurricane Andrew, Kou-Roung Chang, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p377-386.

How to Optimize Light-Gage, Cold-Formed Steel Beam Scott A. Burns, (Analysis and Computation, Franklin Y.

Cheng, ed., 1994), p104-112.

Human Extender: A Material Handling System, H. Kazerooni, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p37-43.

A Human Factors Approach to Waste Form Design, Mi-chael A. Rodriguez, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p684-690.

Huntsville Students Win National Concrete-Canoe Contest for Second Straight Year, NE Aug. 94, p1,7.

Hydraulic Model Studies of Recessed Curb Inlets and Bridge Drains, E. R. Holley, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p528-532.

A Hypermedia Constructability System, Bob McCullouch and Bob Patty, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1397-1404.

Implementation of Spent Fuel Storage Options - A Utility Project Engineers Perspective, Steven M. Unikewicz, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p370-374.

Implication of Waste Package Heat Output Distributions Resulting From Waste Stream Variability, John F. King, Carol J. Rhodes and Steven F. Saterlie, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p868-876.

Improving Project Management of Design, Stuart D. Anderson and Richard L. Tucker, ME July/Aug. 94, p35-

Inelastic Bending and Torsion of Steel I-Beams, Yong Lin Pi and N. S. Trahair, ST Dec. 94, p3397-3417.

Information Modeling and Applications, Victor E. Sanvi-do, Kirby A. Kuntz, Theodore D. Lynch, John I. Messner and David R. Riley, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p786-789.

Innovations in Major Suspension Bridge Design, Klaus H. Ostenfeld, (Spatial, Lattice and Tension Structures, Joh F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p772-778.

Integrated Capstone Design Experience, Everett E. McEwen, El Apr. 94, p212-220.

Integrated Design-Process Model, Victor E. Sanvido and Kevin J. Norton, ME Sept./Oct. 94, p55-62.

Intelligent Design and Remediation of Shallow Landfill Burial Systems, James C. Ascough, II, Leonard J. Lane and Thomas E. Hakonson, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p257-264.

An Intelligent Robotic Vehicle for Lunar/Martian Applica-tions, Fei-Yue Wang, Michael Marefat, Paul J. A. Lever and Larry Schooley, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p193-201.

Investigating the Behavior of a Lattice Structural Section, L. Shan and M. Hanson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p725-730.

Investigation and Design Concepts for a Nuclear Waste Repository in the Kola Peninsula of Northwest Russia, Nikolay N. Melnikov and William R. Sharp, (High Level Radioactive Waste Management, High Level Radioac-Radioactive waste management, Figil Level Radioactive Waste Program Committee, 1994), p523-529.

Investigation of Performance of Bridge Abutments in Seismic Regions, Raj Siddharthan, Mahmoud El-Gamal and

Emanuel A. Maragakis, ST Apr. 94, p1327-1346.

An Investigation of the Reinforcing Effect of Stone Columns in Soft Clay, Doug Stewart and Martin Fahey, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p513-524.

Japan Builds 21st Century Monuments, Charles R.

Heidengren, CE Aug. 94, p57-59.

K-Factor for Columns in any Type of Construction: Nonparadoxical Approach, J. Dario Aristizabal-Ochoa, ST Apr. 94, p1272-1290.

Keller Canyon Fills a Need, Jill Shapiro and Lawrence H.

Roth, CE Oct. 93, p44-47

The Key is Constructability, William J. Schmitz and Theodore von Rosenvinge, IV, CE Aug. 94, p54-56.

The Kinematic Design of a Robotic Large Space Structure Construction Service, Mark R. Routson, Jackson C. S. Yang and Thomas C. Taylor, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p229-238.

Knowledge-Intensive Database System for Making Effective Use of Construction Lessons Learned, Nabil Kartam, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1139-1145.

Kumar, Prasanna N. Jeffrey R. Williams, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1365-1371.

Laterally Loaded Piles in Elastic Media, Keming Sun, GT Aug. 94, p1324-1344.

A League of Their Own, Paul Tarricone, CE May 94, p58-

61. Lessons Learned from the Design, Construction and Operation of Hydroelectric Facilities, Task Committee on Lessons Learned from the Design, Construction and Operation of Hydroelectric Facilities of the Hydropower

Committee, Energy Division, ASCE, (Edward F. Carter, chmn.), 1994, 0-7844-0000-8, 105pp. Linear Programming for Analysis of Material Recovery Facilities, Jay R. Lund, George Tchobanoglous, Robert Anex and Renée A. Lawver, EE Sept./Oct. 94, p1082-1094.

Liquefaction in Silty Soils: Design and Analysis, W. D. Liam Finn, R. H. Ledbetter and Guoxi Wu, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p51-76.

Local Web Crippling of Unstiffened Multi-Cell Box Sections, Mark R. Kaczinski, Christopher R. Schneider, Robert J. Dexter and Le-Wu Lu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p343-348.

Logistics Carriers for the First Lunar Outpost, Thomas M. Polette, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj,

ed., 1994), p1046-1058.

Long Term Nuclear Criticality Potential in Waste Packag es, Daniel A. Thomas and Thomas W. Doering, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p838-844.

Long-Term Effects of Neutron Absorber and Fuel Matrix Corrosion on Criticality, William G. Culbreth and Paige R. Zielinski, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p634-641.

Lunar Base Aspects for Biotechnology Industry, Judith Fielder and Nickolaus Leggett, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1230-1236.

Lunar Base Construction Using the Reinforce Earth Method with Geotextile, Mikiya Okumura, Yasuhiro Ohashi, Takao Ueno, Shojiro Motoyui and Kiosuke Murakawa, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1106-1115.

A Machine Learning Decision Support System for Collab-orative Design, Nenad Ivezic and James H. Garrett, Jr., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p901-908.

Managing Uncertainty in Project Planning and Execution: Introduction and Overview, Guru N. Rao, Francois Gro-

bler and Liang Y. Liu, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p33-40. Marina Ashdod, Israel - An Investor's Turn-Key Project Design, Rami Raviv, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p244-247.

Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994, 0-7844-

0028-8, 620pp.

Masonry Carries the Load, Daniel P. Abrams, CE Feb. 93, p66-67.

A Membrane Structure for a Lunar Assembly Building, Mark E. Schroeder and Philip J. Richter, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p186-195.

Methodology for Comparing Lunar Settlement Designs, Keith Trivelpiece, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p969-978.

Methods to Control Wind-Induced Building Motions, Ah-san Kareem, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p654-659.

Methods to Mitigate Thermally Induced Distortion, Fred M. Cutting, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p514-523.

Microcomputer-Aided Analysis and Design of Spandrel Concrete Beams Subjected to Combined Bending and Torsional Loads, Nadar Ghafoori and Jeffrey Bucholc, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1711-1718.

Minimization of Multistage RBC Active Disc Area, Roland Leduc and Ian Buchanan, EE Mar./Apr. 93, p271-286.

Minimum Design Loads for Buildings and Other Structures (ASCE 7-93), Revision of ANSI/ASCE 7-88 (St No. 93-007) American Society of Civil Engineers, 1994, 0-87262-904-X, 135pp.

Modeling Ecological Impacts of Destratification, S. Geoffrey Schladow, David P. Hamilton and Murray C. Burling, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1321-1325

Modeling Full-Scale Diffused Aeration Systems, Terry L. Johnson and Ross E. McKinney, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed.

and Mare Edwards, ed., 1994), p702-709.

Modeling Pollutant Fate and Transport in Constructed Wetlands, Russell T. Brown, Joanne Field, Michael J. Zanoli and Ron W. Crites, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p532-539.

Moment-Rotation Behavior of Pultruded Beam-to-Column Connections, J. T. Mottram and A. J. Bass, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p423-428.

Monitored Retrievable Storage (MRS) Facility Project Status, Ronald A. Milner, Victor W. Trebules and James B. Blandford, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1358-1364.

Monitored Retrievable Storage/Multi-Purpose Canister Analysis: Simulation and Economics of Automation, Phil C. Bennett and Joe B. Stringer, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p363-369.

MPC Closure Weld Model Study, Brain J. Kruse, Joe B. Stringer and Giles G. Childress, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p435-443.

Multi-Barrier Borehole Canister Designs for a Tuff Reposi-tory, David E. James, Robert L. Skaggs and Suneeta Mohansingh, (High Level Radioactive Waste Manage-ment, High Level Radioactive Waste Program Committee, 1994), p650-657.

181

Multi-Barrier Waste Package Fabrication and Closure Development, Wayne E. Wallin, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p955-962.

Multi-Purpose Canister Criticality Control Design Fea tures, James R. Thornton, Kelvin J. Montague, Alan H. Wells and Daniel A. Thomas, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p823-830.

Multimedia Technologies for Civil and Construction Engineering Professional Practice, Jorge A. Vanegas and Gary Smith, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p592-599.

Multimedia Technology and Structural Steel Design, Ab-bas Aminmansour, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p315-320.

Multiple Use Pier Facilities in Parks, Jim Posda and Jon Guerry Taylor, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p414-423.

A Near-Term, Long-Duration, Lunar Outpost Design, S. Sture, S. D. Jolly and J. Happel, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p237-246.

New Airfoil-Design Concept with Improved Aerodynamic Characteristics, Demeter G. Fertis, AS July 94, p328-

- New Design and Construction of Marinas in Israel, Rami Raviv, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994),
- Next Generation Space Telescope. I: Design Considera-tions, B. Scott May and Nicholas P. Jones, AS Oct. 94, p355-374.

Nonlinear Reservoir Routing: Particular Analytical Solution, H. A. Basha, HY May 94, p624-632.

- A Nonlinear-Analysis-Based Procedure for Evaluating Cond-Carrying Capacity of In-Plane Steel Frames, Fumio Nishino, Buntara S. Gan and Eiki Yamaguchi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), pl 179-1184.
- Novel Design Algorithms for K Factor Calculation and Beam-Column Selection, N. Agbayani, P. Jayachandran and D. Sriram, ST Dec. 93, p3630-3648.
- Numerical Approach to Clarifier Operation According to Flux Theory, Bruce J. Alderman, Thomas L. Theis and Anthony G. Collins, EE May/June 94, p670-676.
- A Numerical Study of Convection Heat Transfer Within Enclosed Horizontal Rod-Bundles, M. Keyhani and L. Luo, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),
- An Object-Oriented Approach for Reinforced Concrete Design, Ajay B. Kulkarni and Kamal B. Rojiani, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p161-168.

On the Shoulders of Giants, Francis E. Griggs, Jr., El July 94, p254-264.

- Onboard Image Processing With Transputers, András Balázs, József Biró and Sándor Szalai, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1323-
- Optimal Design Conception of Grid Domes in Practice, Xue-Ren Hu and Young-Feng Luo, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p430-439.
- The Optimal Selection of Robot Modules for Space Manipulators, Robert Ambrose and Delbert Tesar, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p239-249.

Optimization of Controlled Structures: Using H., Theory, N. S. Khot and D. E. Veley, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p266-275.

Optimization of the Design and Operation of Soil Vapor Extraction Systems, Marshall W. Davert and William W-G. Yeh, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p181-184.

Optimization Procedure for Design of High-Speed Prop-Rotors, Aditi Chattopadhyay and Johnny R. Narayan, AS Apr. 94, p143-155.

Optimizing Secondary Clarifier Performance: A Presenta-tion Outline, John K. Esler, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare

Edwards, ed., 1994), p202-208. An Overview of A.S.C.E. Manual 50 "Planning and Design Guidelines for Small Craft Harbors", Fred A. Klancnik, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p196-200.

An Overview of the Analysis and Design Techniques Used on the Main Tunnels of the SSC, Steven H. Baldauf, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p1967-1974.

Performance Assessment Model of a Single Waste Package, William J. O'Connell, Tzou-Shin Ueng and Lynn C. Lewis, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1188-1194.

Performance of Offshore Platforms in Hurricane Andrew, Ahsan Kareem and Charles E. Smith, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994),

Performance of Submerged Vanes for Control of Sediment in an Irrigation Canal, Steven W. Tamis, (Hydraulic En-gineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), pl 181-1185.

Period-Dependent Effects in Seismic Torsional Response of Code Systems, Adrian M. Chandler, Joseph C. Correnza and Graham L. Hutchinson, ST Dec. 94,

Planning and Design Guidelines for Small Craft Harbors, Revised edition (M&R No. 50), Task Committee on Marinas 2000, American Society of Civil Engineers, (Fred Klancnik, chmn.), 1994, 0-7844-0033-4, 291pp.

Planning, Assessing and Implementing Diagnostic Rehabilitation Options, B. Jay Schrock, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p101-110.

Plans for Managing High Level Waste at the Savannah River Site, N. A. Sheikh and S. R. Salaymeh, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1037-

1047

Port of Sines West Breakwater Rehabilitation Strategy Selected, Manuel Dinis C. Dias, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p25-34.

Prediction of Ground Deformations Due to Excavation-Application to Tunnel Lining Design in Weak Rock, Wern-ping Chen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1997-2005.

A Probabilistic Approach to Assessing Radioactive Waste Container Lifetimes, Fiona M. Porter, Chris C. Naish and Susan M. Sharland. (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1008-1013.

A Probability Based Approach to the Design and Operation of Soil Vapor Extraction Systems, Kenneth K. Kebbell and William F. McTernan, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare

Edwards, ed., 1994), p564-571.

Progress in Reinforced Concrete Column Design, R. Green, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p455-460. Progress in Reinforced Concrete Column Design: An In-

troduction, S. Ali Mirza, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p429-431.

Project Case Study: Space Frame Roof Structure, Main Stadium, Shah Alam Sport Complex, Selangor, Malaysia, James A. Moses, (Spatial, Lattice and Tension Struc-tures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p377-382.

Protection Against Scour at SAF Stilling Basins, Charles E. Rice and Kem C. Kadavy, HY Jan. 93, p133-139.

Prototype to Product - Challenge and Frustrations, Ian F.

C. Smith, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1695-1702.

Punching Shear of Reinforced Concrete Shell Structures, Gajanan M. Sabnis and Amjad A. Shadid, (Spatial, Lat tice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p907-

PWR Axial Burnup Profile Database, R. J. Cacciapouti, S. Van Volkinburg and L. A. Hassler, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p739-743.

Qualification Leak Testing of the GA-4 and GA-9 Closure Seal Design, Richard H. Boonstra, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p923-930.

Quality Performance on Successful Project, W. B. Ledbet-

ter, CO Mar. 94, p34-46.

Quality-Measurement Matrix, James D. Stevens, Charles Glagola and William B. Ledbetter, ME Nov./Dec. 94, p30-35

Recent Advances in Engineering Design Methodologies, Steven J. Fenves, (Analysis and Computation, Franklin

Y. Cheng, ed., 1994), p14-24.

Recent Advances in Precision Surveying Technology and Integrated Deformation Analysis, Adam Chrzanowski, W. Trevor Greening and Anna Szostak-Chrzanowski, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p721-731.

Recent Studies of the Behaviour of Semi-Rigid Composite Connections, David A. Nethercot and Riccardo Zandonini, (Structures Congress XII, N. C. Baker, ed. and

Barry J. Loodno, ed., 1994), p1143-1148.
Redundancy-Constrained Minimum-Cost Design of Water-Distribution Nets, Heekyung Park and Jon C.

Liebman, WR Jan./Feb. 93, 983-98.

Refinement of Cross-Flow Turbine Design Parameters,
Hara G. S. Totapally and Nadim M. Aziz, EY Dec. 94,

p133-147.

Reliability of Light-Gage Metal Joist Hangers, Francis O. Berkoh and Juan J. Salinas, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p906-

Reliability-Based Design of Prestressed Concrete Beams Ali S. Al-Harthy and Dan M. Frangopol, ST Nov. 94, p3156-3177.

Reliability-Based Pier Scour Engineering, Peggy A. Johnson, HY Oct. 92, p1344-1358. Retaining and Flood Walls, U.S. Army Corps of Engineers,

1994, 0-87262-968-6, 320pp.

Review of Cold-Formed Steel Purlin Design, Roger A. La-Boube, (Structures Congress XII, N. C . Baker, ed. and Barry J. Loodno, ed., 1994), p1578-1580.

Riprap Sizing for Modified ARS-Type Basin, Steven R. Abt, Glenn B. Hamilton, Chester C. Watson and John Smith, HY Feb. 94, p260-267.

Robust EBS Design and Source-Term Analysis for the Partially Saturated Yucca Mountain Site, Mick Apted, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p485-490.

Roller-Compacted Concrete, U.S. Army Corps of Engineers, 1994, 0-87262-999-6, 100pp.

Safeguarding the Disposal of Canada's Used Nuclear Fuel, P. Baumgartner and G. R. Simmons, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1782-1790.

Science Operations and Engineering Impacts to Lunar Outpost Design, John E. Gruener and David S. McKay, (Engineering Impacts of Control of C gineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p998-1007.

SDC Detector Foundation Requirements for the SSC, J. I Western, M. W. Butalla, H. James Krebs and Gary W Tulk, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p767-772.

Second Order Directional Wave Kinematics in Shallow Water, Jagat N. Sharma and R. G. Dean, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p165-179.

Sediment Transport in Sewers and Design Implications, Chandramouli Nalluri and Aminuddin Ab Ghani, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p933-938.

Selecting the Design Basis Fuel for the Multi-Purpose Canister, Douglas A. Williamson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p430-434.

Selection of Earth Retention Systems Using Expert System, V. Sinha, M. Arockiasamy and A. Sinha, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p418-

425 Shear Connection in Haunched Composite Beams with Sloping Sides, Deric John Oehlers and Sung Moo Park, ST July 94, p2227-2232.

Shear Design Guidelines for Polyester Concrete Using Recycled Plastic, K. S. Rebeiz, S. P. Serhal and D. W. Fowler, (Structures Congress XII, N. C. Baker, ed. and

Barry J. Loodno, ed., 1994), p821-826.

Shielding Analysis for the Conceptual Design of the MPC Transportation Cask, Kelvin J. Montague, James R. Thornton, Jr. and Robert G. Eble, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p918-922. Shoaling of Wave Spectra in Front of Reflective Structures,

Ernest R. Smith and Steven A. Hughes, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and

J. Michael Hemsley, ed., 1994), p642-656.
The Significance of Hydrodynamic Forces in Coastal Embankment Design, Bang-Fuh Chen, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p880-889

Simplified Strength Prediction for Cold-Formed C- and Z-Shapes, R. A. LaBoube, ST June 93, p1733-1739.

Simulation of Autonomous Robotic Excavation, Regis Hoffman and Reid Simmons, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p115-122.

Sludge Hopper Design for Activated Sludge Clarifiers, O. E. Albertson, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p217-224.

Software for marina anchoring design on chains or cables, Gilles Collin, (Marinas, Parks and Recreation Develop-ments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p398-405.

Some Aspects of Compression Member Design in Australia, Murray J. Clarke and Russell Q. Bridge, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p1587-1592.

Space Frame Solution for the Design of Large Pyramid Structures, T. J. DeGanyar, M. D. Griffin and M. R. Patterson, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p47-56.

Space Frames and Polyhedra, J. François Gabriel, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994),

p1036-1044.

Space Station Microgravity Analysis and Assessment, John P. Wetzel, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p463-472.

Spacecab: A Concept for Commercial Human Spaceflight, Andrew Petro, Engineering, Construction, and Opera-tions in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1504-1511.

Special Considerations in the Design of Connections for Recycled Wood/Plastic Composite Lumber, George H. Kyanka, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p929-933.

Spotting Trends in Design and Construction, ME Nov./ Dec. 94, p13.

Stability and Wave Transmission at Low-Crested Rubble-Mound Structures, Jentsje W. van der Meer and Ivar F. R. Daemen, WW Jan./Feb. 94, p1-19. Stability of Columns under Uniform Axial Load with Semirigid Connections, J. Dario Aristizabal-Ochoa, ST Nov.

94, p3212-3222.

Staff Technical Position on Consideration of Fault Displacement Hazards in Geologic Repository Design, Keith I. McConnell and Michael P. Lee, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2257-2259

Standard Guidelines for the Design of Urban Subsurface Drainage (ANSI/ASCE 12-92) Standard Guidelines for Installation of Urban Subsurface Drainage (ASCE 13-93) Standard Guidelines for Operation and Maintenance of Urban Subsurface Drainage (ASCE 14-93) (St No. 92-012, 93-013, 93-014), American Society of Civil Engineers, 1994, 0-87262-996-1, 60pp

Standard Practice for Direct Design of Buried Precast Concrete Pipe Using Standard Installations (SIDD) (St No. 93-015), American Society of Civil Engineers, 1994, 0-

87262-995-3, 50pp.

Standards for High Level Radioactive Waste Repositories, Dade W. Moeller, Martin J. Steindler, Paul W. Pomeroy and William J. Hinze, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p1417-1421.

Statistical Considerations on Large-Scale Geomechanics Test Design For Nuclear Waste Repository Characterization, Kunsoo Kim and Hang Gao, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1922-1929.

Status-NRC's QA Overview of the High-Level Nuclear Waste Geologic Repository, William L. Belke and Kenneth R. Hooks, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Commit-

tee, 1994), p1716-1721.

Steel Compression Member Design in the 1994 Canadian Standard, D. J. Laurie Kennedy, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994),

SteelDEM: An Interactive Multimedia Intelligent Tutor and Teaching Aid for Structural Steel Design, Abbas Aminmansour, (Computing in Civil Engineering, Khalil

Animinasiour, (Compaing in Civil Engineering, Khaii Khozeimeh, ed., 1994), p1458-1464. Steep Constructed Stream Channels and Chutes, Kenneth R. Wright, F. Robert McGregor and Gary Lacy, (Hy-draulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p657-661.

A Stewart Platform Lunar Rover, Roger Bostelman, James Albus, Karl Murphy, Tsung-Ming Tsai and Ed Amatucci, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p175-183. Storage Tanks: Going Above Ground, Thomas C. Wilson,

CE Mar. 94, p59-61.

Strategy for Computer Integrated Construction Technology, Paul Teicholz and Martin Fischer, CO Mar. 94,

gy, Paul p117-131.

- Structured Tradeoffs Preference Elicitation: Evaluating CRWMS Design and Operations, Hollister Hartman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p619-626
- The Structuring of a New Architectural Landscape, Karen Van Lengen, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p956.
- Strut-Tie Model Design of Disturbed Regions in Concrete Structures, Y. M. Yun, A. Alshegeir and J. A. Ramirez, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodin, ed., 1994), p233-238.

Success Syndrome: The Collapse of the Dee Bridge, Henry Petroski, CE Apr. 94, p52-55.

A Suggested International Classification of Marinas, Jon Guerry Taylor, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed.,

1994), p140-143.

Systems Engineering Applied to the Development of the Yucca Mountain Project Design Requirements Documents, M. Sam Rindskopf and Dennis C. Royer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1634-1640.

Teaching Engineering to Increase Motivation, N. C. Mick-leborough and D. G. Wareham, El Jan. 94, p29-35.

Tests of Full-Size Pretensioned AASHTO Beams with De bonded Strands, O. Abdalla, J. A. Ramirez and R. H. Lee, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1409-1414.

Thermal Cycling of Thin and Thick Ply Composites, Stephen S. Tompkins, James Y. Shen and Andre J. Lavoie, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p326-335.

Thermal Finite Element Analyses of 26 Waste Package Spent Nuclear Fuel Loading Configurations, A. O. Thompson and M. J. Plinski, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p796-800.

Three Dimensional Simulation of Progressive Tunneling Process for Lining Design of Intersecting Tunnels in Soft Rock, Liqiu (Lichu) Guan, Steven H. Baldauf and Wern-Ping (Nick) Chen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2006-2013.

Towards Robust, Effective and Efficient Second Order Analysis of Practical Steel Frames, S. L. Chan, Z. W. Zhou and W. F. Chen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1173-1178.

Transactional Support for Concurrent Finite Element Anal-ysis & Design, Sanjai Tiwari and H. R. Riggs, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p798-805.

Transfer of Spent Nuclear Fuel Into Multi-Purpose Canister Storage, Roger G. Wagstaff, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p444-451.

Transportation Capstone Design Project: Review and Future Directions, John G. Schoon, El Jan. 94, p70-89.

A Tunnel Boring System for the Yucca Mountain Project, Steven N. Short, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p381-385.

Tunnel School, Brian Brenner and Richard O'Brien, El Oct. 94, p405-412.

Ultimate Depth of Scour Around Bridge Piers, Sarfaraz A Ansari and Alimul Qadar, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p51-55.

An Ultra-Lightweight Advanced Technology Telescope for Space Applications, P. C. Chen, R. J. Oliversen, H. Hojaji, W. K. Chu and T. L. Wilson, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1422-1430.

Unified Design of Horizontal Circular Curves, Said M. Easa, TE Jan./Feb. 93, p94-110.

URSULA: Design of an Underwater Robot for Nuclear Reactor Vessel Inspection, J. Barry Fallon, Steven B. Shooter, Charles F. Reinholtz and S. William Glass, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p311-319.

Use of FESWMS-2DH for the Attaway Road Bridge Repair Project, M. A. Ports, D. D. Dee, Jr. and J. Warren, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p579-583.

Using Knowledge Based Systems for Training the Young Engineer, James Crum and Michael Mulvihill, (Comput ing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1286-1293

Utilizing Mathcad for Hydraulic Design of Stormwater Pump Stations, T. Chris Evensen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p814-821.

Validation of the European Yield Model for Nailed Connections, Steve G. Winistorfer, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p923-928.

Variation of Ductility Capacity of Steel Beam-Columns, Masayoshi Nakashima, ST July 94, p1941-1960.

Ventilation Considerations for Repository Subsurface Advanced Conceptual Design, Hang Yang and Kalyan K. Bhattacharyya, (High Level Radioactive Waste Manage-ment, High Level Radioactive Waste Program Committee, 1994), p530-537.

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- A Version and Configuration Scheme for Collaborative Engineering, Karthik Krishnamurthy and Kincho Law, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2022-2029.
- Vortex-Tube Sediment Extractors. Part II: Design, Edmund Atkinson, HY Oct. 94, p1126-1138.
- Waterproofing a Structural Slab at Ground Anchor Locations, David L. Druss, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p77-92.
- Wave Grouping in Locally Generated Seas on Short Fetches, Edward F. Thompson and John Oliver, WW Mar./Apr. 94, p220-225.
- Wave Runup on and Wave Reflection from Coastal Structures, John P. Ahrens, William N. Seelig, Donald L. Ward and William Allsop, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p489-502.
- Wheel Space Station for 2025, Jason Hand and David Hargis, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p846-852.
- When are Loads Taught? A Case Study and National Trends. Richard J. Schmidt, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1358-1363.
- Working Stress Design Method for Reinforced Soil Walls, Mauricio Ehrlich and James K. Mitchell, GT Apr. 94, p675-645
- Worldwide Calibration of API RP2A-LRFD, R. C. Turner, C. P. Ellinas and G. A. N. Thomas, WW Sept./Oct. 94, p423-433.
- Wright was Wrong?, CE Jan. 94, p30.
- Zero-Gravity Sports Centers, Patrick Collins, Takashi Fukuoka and Tsuyoshi Nishimura, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p504-513.

Design criteria

- An Application of Inverse Problem Techniques to Spatial Structures, Pei Shan Chen, Mamoru Kawaguchi and Masaru Abe, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p113-122.
- Application of Lessons Learned Experience To Human Factor Engineering of the Planned Monitored Retrievable Storage Facility, Dan Kane, Hok Wai Kwan alon Richardson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p351-357.
- Asphalt Applications for Railroad Maintenance and Construction, Jerry G. Rose, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p617-626.
- Columnless in Chicago, Daniel A. Cuoco, Udom Hungspruke and Robert P. DeScenza, CE Nov. 94, p42-45.
- Considerations for Design Criteria for Lunar Structures, Eric P. Steinberg and William Bulleit, AS Apr. 94, p188-198.
- Creating and Abstracting Lessons-Learned from BCO Reviews, Michael C. Fu and E. William East, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1146-155.
- Design and Construction of Fiberglass Composite Building, Ed (Ahmed) Morsi and J. Larralde, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p751-757.
- Design Considerations for Use of Wedge Wire Screens at Surface Water Intake Structures, Mahmood Naghash and Adnan M. Alsaffar, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p452-456.
- Design Criteria for Lunar Construction Equipment, John V. Gies, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1237-1255.
- Design of Socketed Drilled Shafts in Limestone, M. C. McVay, F. C. Townsend and R. C. Williams, GT Oct. 92, p1626-1637.

- The Development of an Expert System Used in Preliminary Design of Concrete Bridges, Nicolaus Stuurstraat and Cornelis van der Veen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p909-912.
- Distributional Information for Ejection Fragments, Eric P. Steinberg, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p402-413.
- Durability of Calcium Aluminate Cement Concretes, A. Capmas and C. M. George, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p377-405.
- Dynamic Loading of Airfield Pavements Caused by Aircraft Operations on Rough Runways, Anthony G. Gerardi and Wayne G. Johnson, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p30-41.
- Effect of Joint Rigidity on Buckling Strength of Single Layer Lattice Domes, Shiro Kato, Itaru Mutoh and Masaaki Shomura, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p469-478.
- Evaluation of Wood Floor Vibration Design Criteria, R. E. Kalkert and J. D. Dolan, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p520-525.
- A Generic Inflatable Structure for a Lunar/Martian Base, Willy Z. Sadeh and Marvin E. Criswell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1146-1156.
- Hurricane Shelter Design Criteria for Public Schools, Ajay Shanker, R. Wayne Drummond, Raja R. Issa and Kalika Wamanacharya, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p233-240.
- Implementation of Elastic Layered Theory for Design of Unbonded Overlays, Walter R. Barker, Jim W. Hall, Jr. and Carlos R. Gonzalez, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p42-52.
- Incorporating Economic Analysis in Irrigation Design and Management, Ujjayant Chakravorty and James Roumasset, WR Nov./Dec. 94, p819-835.
- ISDP: Integrated Approach to Seismic Design of Reinforced Concrete Structures, William C. Stone and Andrew W. Taylor, ST Dec. 94, p3548-3566.
- Jury Verdict: Frequency versus Risk-Based Culvert Design, Gary L. Lewis, WR Mar./Apr. 92, p166-184.
- Lateral Buckling: A Comparison of AISC-LRFD and Eurocode 3, Reynaud L. Serrette, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p333-336.
- Long-Term Strength Development of Pavement Concretes, David A. Lange, MT Feb. 94, p78-87.
- Lower Bounds for Overall Buckling of Spherical Space Domes, M. Kashani and J. G. A. Croll, EM May 94, p949-970.
- Microgravity Research in a Space Station Environment, Steven D. Del Basso, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p473-482.
- Multi-purpose Canister Conceptual Design Approach, Nick L. Seagle, Giles G. Childress, III, James R. Thornton, David N. Summers and Alan H. Wells, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1143–1151.
- Multicriteria Optimization in Engineering Design, Andrzej Ameljańczyk, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p318-325.
- Overview Electrical Substation Structures Design Guide, Leon Kempner, Jr., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p597-600.
- Probabilistic Observation Method for Settlement-Based Design of a Landfill Cover, Wilson H. Tank, Robert B. Gilbert, Mauricio Angulo and Richard S. Williams, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1573-1589.

Probability of Severe Hurricanes Across the Gulf of Mexico, L. E. Chouinard and Chang Liu, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994),

Rigid Beam-To-Column Connection Detail for Circular Composite Columns, Atorod Azizinamini and Y. Shekar, (Structures Congress XII, N. C. Baker, ed. and Barry J.

Loodno, ed., 1994), p1155-1160.

The Scottsdale Water Campus: There's Nothing Like It, Wallace A. Ambrose, Brad Hemken, Gary G. Small and Leonard Dueker, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p665-668.

Seismic Analysis of Bridges: Simplified or Refined Approach, Y. Chen, (Structures Congress XII, N. C. Baker,

ed. and Barry J. Loodno, ed., 1994), p79-84

Seismic Performance of Railway Bridges, V. Sharma, J. Choros, E. M. Maragakis and W. G. Byers, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p367-372.

Seismic Response of Full-Scale Five-Story Reinforced-Masonry Building, F. Seible, M. J. N. Priestley, G. R. Kingsley and A. G. Kürkchübasche, ST Mar. 94, p925-

Shelters for Hurricane Refuge, Herbert S. Saffir, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p241-248.

Timber Structures, Daniel F. Tully, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p97-102.

Transition from the Functional Requirements to the Technical Requirements Baseline, T. A. Mozhi, S. Douara, M. Senderling and T. Truong, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1641-1647.

Estimation of Design Surge Heights by Utilizing Meteoro-logic and Oceanographic Data, Jahir Uddin Chowdhury and A. K. M. Tareque, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p918-922.

Quick Checks for Structural Computer Analysis, Brian Brenner, Cindy Gagnon and C. K. Shah, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p2073-2080.

Design events

Evaluating an Autoregressive Model for Stream Flow Forecasting, Yuan Cheng, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1105-1109

Frequency of the 1993 Flood in the Upper Mississippi River Basin, W. O. Thomas, Jr. and D. A. Eash, (Hy-draulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p16-20.

Probable Maximum Flood Estimation for New and Existing Dams, Anand Prakash, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p361-365.

Relationships between n-Day Flood Volumes for Infrequent Large Floods, James B. Balocki and Stephen J.

Burges, WR Nov./Dec. 94, p794-818.

Seismic Issues in Structural Engineering Codes and Practice, Vilas Mujumdar, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1214-1219.

Design improvements

Brief History of the Port of Sines and General Presentation of West Breakwater, Manuel Dinis C. Dias and Jeno F. Toppler, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p3-24.

Clarifier Enhancements Yield Excellent Performance, Cindy L. Wallis-Lage and David B. Hunt, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p194-201.

Computers are a Useful Tool (ltr), CE Apr. 94, p32.

Damage to Engineered Structures at Homestead AFB, Maurice R. Harlan, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p213-222.

Dispersive-Flow Energy Dissipator, Shou Long Yang, HY Dec. 94, p1401-1408

Following the Geotechnical Studies of the West-Breakwater at Sines; Hydro-Geotechnical Stability of Breakwaters, Frans B. J. Barends and Jack Hagenaar, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p124-167

The Importance of Hurricane Risk Assessment in Housing and Improved Design and Building Practice Therein, Desmond Imbert, Patrick Drakes and David Prevatt, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad So-

tani, ed., 1994), p684-695.

An Improved Design of Fishways Under High Variation of Headwater, Kuo-Cheng Hsieh, Sue-Jen Wu and Che-Yuan Huang, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p457-

Reconstruction of the Dewey Square Tunnel, Brian Bren-ner, Dincer Akyali and Paul Moyer, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham,

ed., 1994), p772-780.

Short Synthesis of Some Studies Carried Out for the Repairing of Sines Port West Breakwater, G. Paolella and S. Corsini, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p70-98.

Design standards

Consolidation of Ground Reclaimed by Inhomogeneous Clay, Hiroyuki Tanaka, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1262-1273

The Context-Oriented Model: An improved Modeling Approach for Representing and Processing Design Standards, Han Kiliccote, James H. Garrett, Jr., Thomas J. Chmielenski and Kent A. Reed, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p145-152

Critique - Manufactured Housing Session, Frank Walter, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad So-

tani, ed., 1994), p203-212.

Development of Hardwood Glulam Timber Bridge Standards, H. B. Manbeck, J. J. Janowiak, P. R. Blankenhorn and P. Labosky, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1304-1309.

Evaluation of Design Wind Loads for Manufactured Homes and Needed Improvements, R. D. Marshall, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p185-194.

FEM in a Design Code Environment, Philip V. DeSantis and James E. Wild, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p454-461.

Harmonization of Reliability-Based Timber Engineering Codes and Standards, Ronald W. Anthony and Jozsef Bodig, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p503-507.

A Look at the Superpave Level 1 Mix Design Process, R. Michael Anderson and Robert B. McGennis, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p880-887.

LRFD Provisions for Wood Bridges, Michael A. Ritter and Andrzej S. Nowak, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p549-554.

Representation and Processing of Design Standards: a Bi-furcation between Research and Practice, Steven J. Fenves, James H. Garrett and M. Maher Hakim, (Struc-tures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p122-127.

Design storms

- Modeling Hydrologic and Pollutant Transport Processes for Stromwater Runoff to Surface Waters, Leslie L. Shoemaker, Mohammed Lahlou, Andrew Stoddard and James Pagenkopf, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1208-1212.
- Predicting the Impact from Significant Storm Events on a Hazardous Waste Site, Udai P. Singh, Neal P. Dixon and J. Stephen Mitchell, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p72-780.
- Seasonal Distributions of Peak Flows From Small Agricultural Watersheds, James V. Bonta and A. Ramachandra Rao, IR Mar./Apr. 94, p422-439.
- Why Design Storm Methods Have Become Unethical, William James, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1203-1207.

Design waves

- Case Studies of Extreme Wave Analysis: A Comparative Analysis, Gerbrant van Vledder, Yoshimi Goda, Peter Hawkes, Etienne Mansard, Maria Jesus Martin, Martin Mathiesen, Eric Peltier and Edward Thompson, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p978-992.
- Design Waves and Wave Spectra for Engineering Applications, Chung-Chu Teng, Gerald L. Timpe, Ian M. Palaci and David A. Brown, Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p993-1007.
- The Determination of Typhoon Design Wave By Sy-thetic Probibility Method, Nai Kuang Liang and Hai Kuan Peng, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p1040-1047.
- Intercomparison of Extremal Wave Analysis Methods Using Numerically Simulated Data, Yoshimi Goda, Peter Hawkes, Etienne Mansard, Maria Jesus Martin, Martin Mathiesen, Eric Peltier, Edward Thompson and Gerbrant van Vledder, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p963-977.
- On Hurricane-Generated Seas, Michel K. Ochi, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p374-387.

Design wind speed

- Evaluation of Design Wind Loads for Manufactured Homes and Needed Improvements, R. D. Marshall, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p185-194.
- Hurricane Andrew The Ultimate Curtain Wall Test, James Hayes Larkin, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p424-429.
- Proposed Hurricane Wind Speeds for ASCE 7-95, Jon A. Peterka and Kishor Mehta, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p461-466.

Desorption

- Laboratory and Field Demonstrations of Sediment Treatment Technologies by the USEPA's Assessment and Remediation of Contaminated Sediments (ARCS) Program, Stephen Garbaciak, Jr., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p567-578.
- Pilot-Scale Demonstrations of Thermal Desorption for the Treatment of Contaminated River Sediment, B. Thomas Kenna, David Conboy, Judith Leithner, Daniel Averett and Stephen Yaksich, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p474-483.

Desulfurization

Fast Foundation for Soft Clay, Joseph R. Hilton, Jr., Richard L. Novotny and Ronald E. Rager, CE Mar. 93, p62-65.

Detention basins

- Dam Safety Issues Related to Urban Detention Ponds, James E. Alverson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p714-717.
- Effect of Nonstandard Rainfall Distributions on Stormwater Management Detention Basins, Robert G. Traver and Ronald A. Chadderton, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), 9612-615.
- Field Test of Stormwater Best Management Practices, S. L. Yu, S. L. Barnes, R. J. Kaighn, Jr. and S. L. Liao, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p508-515.
- Miami International Airport Stormwater NPDES Plan, Armando I. Perez, Jonathan Z. Goldman, Michael F. Schmidt and Edward E. Clark, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p540-547.
- Petroleum Hydrocarbons in Detention-Basin Sediments, Thomas J. Maldonato and Christopher G. Uchrin, EE May/June 94, p683-690.
- Retrofitting a Regional Stormwater Facility, Richard L. Schaefer, Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p209-219.
- Runoff Detention for Flood Volume or Erosion Control, A. Osman Akan and Edward N. Antoun, IR Jan./Feb. 94, p168-178.
- Sizing Stormwater Detention Basins for Pollutant Removal, G. V. Loganathan, E. W. Watkins and D. F. Kibler, EE Nov. Dec. 94, p1380-1399.
- Survey of Stormwater Detention State of Practice, Ben R. Urbonas, Jay Carlson and L. Scott Tucker, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p873-876.
- A Survey of Stormwater Infiltration Basins in the Puget Sound Region, Karin Hilding and Rich Horner, (Wader Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p722-725.

Detention reservoirs

- Preliminary Sizing of Detention Reservoirs to Reduce Peak Discharges, Bruce M. McEnroe, HY Nov. 92, p1540-1549.
- Wet Detention Facility Pollutant Removal Modeling, Thomas R. Sear and Herbert M. Raybourn, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p830-833.

Deterioration

- Cause of Deformed Shapes in Cooling Towers, Jean-François Jullien, Waeil Aflak and Yvan L'Huby, ST May 94, p1471-1488.
- Comparative Analysis of Bridge Superstructure Deterioration, David Veshosky, Carl R. Beidleman, Gerald W. Buetow and Muge Demir, ST July 94, p2123-2136.
- Comparison of Bridge Deterioration Rates, David Veshosky and Carl R. Beidleman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p296-301
- Evaluation of Projects for Rehabilitation of Highway Bridges, J. O. Sobanjo, George Stukhart and Ray W. James, ST Jan. 94, p81-99.
- Integrated Research for Civil Infrastructure Systems: A Future Challenge, S. C. Liu, K. P. Chong and M. P. Singh, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p1-13.
- Magnesium-Sodium Sulfate Attack in Plain and Blended Cements, Rasheeduzzafar, Omar Saeed Baghabra Al-Amoudi, Sahel N.i Abduljauwad and Mohammad Maslehuddin, MT May 94, p201-222.
- Markovian Models for Bridge Maintenance Management, William T. Scherer and Douglas M. Glagola, TE Jan./ Feb. 94, p37-51.

Planning Model for Sewer System Rehabilitation, Edward H. Burgess, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p30-38.

Serviceability of Earth Retaining Structures, Geotechnical Special Publication No. 42, Richard J. Finno, ed., 1994,

0-7844-0051-2, 160pp.

Towards Structural Strength and Safety Evaluation Within Bridge Management Systems, George Hearn, Dan M. Frangopol and Milanendu Chakravorty, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p290-295.

Understanding the Modes of Failure for Sewers, Robert F. Serpente, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p86-100.

Developing countries

Building the Urban Environment, Candace Port-Hull, WP Spring 94, p41-42.

Facilitating Sustainable Development: Is Our Approach Correct? Michael N. T. Cottell, El July 93, p220-224. Getting Together for Sustainable Development, Nicholas

Chryssafopoulos, WP Spring 94, p43-44.

Holistic Approach to Irrigation Management in Developing Countries, Phillip Z. Kirpich, IR Mar./Apr. 93, p323-

Labor-Political Factors for International Firms in Developing Regions, Enno "Ed" Koehn and Frank Atuahene, EI Jan. 94, p41-49

Moisture and Suction in Sanitary Landfills in Semiarid Areas, G. E. Blight, J. M. Ball and J. J. Blight, EE Nov./ Dec. 92, p865-877.

Policy on Private Water Sales in Rural Ghana, Fred O.

Vietnam: Taming the Tiger, Irwin Jay Robinson, WP Spring 94, p6-8.

Development

Application of OOP and GUI to the Development of Educational Software in Structural Mechanics, S. T. Mau and V. Aruna, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1273-1279.

ASCE Board Looks to Society's Future at Spring Session in Mexico City, NE June 94, p1,14.

The Case for Southern Nevada's Thirst, G. C. K. Grinnell, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994). p319-322.

Changing Conditions and Water Elections, Charles H. Lawrance, James M. Stubchaer and Jon A. Ahlroth, WR

July/Aug. 94, p458-475.

Development of an Expert System to Identify Hazardous Highway Spots, Joseph E. Hummer and Paul R. Sloup, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p333-340.

Engineers and Contractors Go Global, Brian J. Lewis, WP Special issue 94, p20-24

Future Launch Systems: The Policy Challenge, Matthew A. Bille, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1452-1461.

The History and Present Status of Microwave Aircraft, William C. Brown, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1482-1491.

Integrated Planning for International River Basin, Alvin S. Goodman, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p130-

Is Bedform Development Chaotic? César Mendoza-Cabrales, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p78-81.

Load and Resistance Factors for Bridge Design Code, Andrzej S. Nowak, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p538-543.

Market Analysis of Marinas and Market Potentials in Asian Regions, Ronald E. Schults, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p238-243.

The Nature of Structural Morphology and Some Interdisci-plinary Examples, Ture Wester, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1000-1009

New Problems in Ground & Water Lease Administration, Allan D. Kotin and Faith F. Backus, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p154-161.

Professional Involvement in Development of Expert Sys-tems for Construction Industry, P. S. Brandon and I. D.

Watson, CP Oct. 94, p507-518.

Relevant Engineering in 21st Century, Henry J. Hatch, EI July 93, p216-219.

Space Commercialization: Problems of Law and Policy, Glenn H. Reynolds, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1462-1470.

Synthetic Estimation of Development Cost of Satellite, Yilin Zhu, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1512-1520.

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Construction of a Cofferdam Pressure Relief System, J. Taylor, W. L. Galbraith, G. Richters, J. E. Baka and C. C. Chang, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p93-111.

Design of Dredge Containment and Dewatering Facilities, John M. Logigian, Edward A. Dudek, Jr. and Michael R. Palermo, (*Dredging '94*, E. Clark McNair, Jr., ed.,

1994), p1230-1239.

Development of an Excavation Plan for Heavy Metal Contaminated Marsh Deposits, John J. Nocera and Thomas M. Simmons, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1220-1229.

Dewatering and Crust Management of Confined Disposal Areas in Galveston Bay, Texas, Richard F. Thomas, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1400-

Effect of Preagitation on Freeze-Thaw-Conditioned Sludge Dewaterability, P. Aarne Vesilind and Jiann-Long Chen, CR Dec. 94, p113-120.

Effect of Sludge Blend on Dewatering Characteristics, Ali Davarinejad and Nikolay Voutchkov, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p273-280.

Flocculation Techniques Used for Dredging Operations, Ronald H. Church, Carl W. Smith and Bernard J. Scheiner, (Dredging '94, E. Clark McNair, Jr., ed.,

1994), p1497-1506.

Marathon Battery Superfund Project - A Review of Design, Construction and Lessons Learned, Michael P. Taylor, Pamela N. Tames and Alan R. Elia, (*Dredging* '94, E. Clark McNair, Jr., ed., 1994), p1210-1219.

Ozonization of Anaerobic Sludge Dewatering Centrate for Ammonia Removal, K. Ramalingam, V. Diyamandoglu and J. Fillos, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p423-427.

Research on the Consolidation of Mud, Erik Toorman and Marc Sas, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p430-439.

Waterproofing a Structural Slab at Ground Anchor Locations, David L. Druss, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p77-92.

Analysis of Deep Excavation in Boston, Andrew J. Whittle, Youssef M. A. Hashash and Robert V. Whitman, GT Jan. 93, p69-90.

Case Study - Performance of Diaphragm Walls During Construction; Predictions vs. Field Measurements, Abdol R. Haghayeghi and Mehrdad Mirzakashani, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p264-270. **Diaphragms**

Bridge Diaphragm Elements with Partial Warping Re-straint, C. C. Fu and Yao T. Hsu, ST Nov. 94, p3388-3395.

Continuity in Precast Prestressed Concrete Girder Bridges, O. Abdalla, J. A. Ramirez and R. H. Lee, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p479-484.

Diaphragm Height of Ejector of Uniform Sediment, Nan-dana Vittal and G. A. Shivcharan Rao, HY Mar. 94, p398-405.

Response of Stressed Timber T - and Box-Beam Bridges, Hota GangaRao, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p701-706.

Seismic Damage-Control Design of Gypsum-Roof Diaphragms, Sashi K. Kunnath, Mehrdad Mehrain and William E. Gates, ST Jan. 94, p120-138.

Steel-Deck-Reinforced Concrete Diaphragms. I, W. Samuel Easterling and Max L. Porter, ST Feb. 94, p560-576.

Steel-Deck-Reinforced Concrete Diaphragms. II, W. Samuel Easterling and Max L. Porter, ST Feb. 94, p577-596.

Diaphragms, mechanics

Diaphragm Action of Cladding in Low-Rise Metal Build-ings, Bala Sockalingam, David Montgomery, Scot Schiff and Peter Sparks, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1048-1053.

Dielectric constant

Electrical Properties of Topopah Spring Tuff as a Function of Saturation, Jeffery J. Roberts and Wunan Lin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2112-2120.

Diesel fuels

Groundwater Remediation at a Superfund Site, Henry Y. He, Jing-Yea Yang and Gregory Powell, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p282-286.

Differential equations

Concurrent E-I Algorithm in Structural Dynamics, E. D. Sotelino, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p169-176.

Equivalent Differential Equations in Fixed-Grid Characteristics Method, Mohamed S. Ghidaoui and Bryan W. Karney, HY Oct. 94, p1159-1175.

Free-Vibration Analysis of Tank Containing Two Liquids, Yu Tang, EM Mar. 94, p618-636.

Large Deflection of Beams under Moment Gradient, S. Chucheepsakul, S. Buncharoen and C. M. Wang, EM

Sept. 94, p1848-1860. Responses of Dynamic Systems Excited by Non-Gaussian Pulse Processes, Sau-Lon James Hu, EM Sept. 93, p1818-1827.

Stability Analysis of Rayleigh-Benard Convection in the Presence of Side Walls, P. Diplas and C. Dietz, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p82-86.

Stability of Active-Tendon Structural Control with Time Delay, L. Zhang, C. Y. Yang, M. J. Chajes and A. H-D. Cheng, EM May 93, p1017-1024.

Stochastic Control With Bounded Sample Paths: An Application to Reservoir Systems, S. G. Fletcher and K. Ponnambalam, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1025-1029.

Torsion of Regular Multicellular Members, Donald L. Dean, ST Dec. 94, p3675-3678.

Differential settlement

Case Studies: Clay Cover Cracking Analysis Using FEM Techniques, Robert Y. Liang, John C. Lommler, Suck-hong Lee and Bob Meyers, (Fracture Mechanics Ap-plied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p86-101.

Design of Underpinning Piles to Reduce Settlements, H. G. Poulos, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1000-1010.

Effect of Orientation of Approach Slabs on Pavement Deformation, H. K. W. Wong and J. C. Small, TE July/Aug. 94, p590-602.

Probabilistic Observation Method for Settlement-Based Design of a Landfill Cover, Wilson H. Tank, Robert B. Gilbert, Mauricio Angulo and Richard S. Williams, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1573-1589.

Settlement Analysis of Landfill Liners over Deep Mined Areas, M. Gabr, J. J. Bowders and D. T. Mooney, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio,

ch. 1994), p436-450.

Tolerable Deformations, Harvey E. Wahls, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1611-1628.

Diffusers

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Design and Testing of Two Ice-Preserving Winter Lake Aeration Systems, Christopher R. Ellis and Heinz G. Stefan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1326-1330

Innovative Design of a Multiport Diffuser, Mindy L. Roberts and Bernadette H. Kolb, (Dredging '94, E.

Clark McNair, Jr., ed., 1994), p56-65.

Modeling Full-Scale Diffused Aeration Systems, Terry L. Johnson and Ross E. McKinney, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p702-709.

Adaptive Numerical Methods for Transport Dominated Processes, Alfio Quarteroni, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p114-126.

Approximating the Imbibition and Absorption Behavior of a Distribution of Matrix Blocks by an Equivalent Spherical Block, Robert W. Zimmerman and Gudmundur S. Bodvarsson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2030-2037.

Critical Concepts for Column Testing, Charles D. Shackel-

ford, GT Oct. 94, p1804-1828.

The Great Lakes Forecasting System: An Overview, Keith W. Bedford and David J. Schwab, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p197-201.

How Should the Migration and Retardation of Colloids be Characterized? Peter Grindrod, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2709-2718.

The Impacts of Roughness Bars on the Mixing Processes, Jianlu Xu and Hsieh Wei Shen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p533-537.

Simulation of Round Buoyant Jet in Stratified Flowing Environment, G. A. Bemporad, HY May 94, p529-543.

Diffusion coefficient

Combining a 2-D Flood Plain Model with GIS for Flood Delineation and Damage Assessment, P. Di Giammarco, E. Todini, David Consuegra, F. Joerin and F. Vitalini, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994),

Diffusivity

Chloride Diffusivity Computation for Cement Paste, E. J. Garboczi and D. P. Bentz, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p159-173.

Design of Mat Foundation for Egg Shape Digesters, S. S. Ibrahim and M. R. Graves, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p13-18.

Digital techniques

Digital Signal Processing Techniques for Active Structural Control, B. F. Spencer, Jr., P. Quast, S. J. Dyke and M. K. Sain, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p327-336.

Experimental Design and Measurement Techniques for Investigation of Two-Phase Flow, Andreas J. Kuck, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), 866-93.

Image Analysis of Surf Zone Hydrodynamics, J. M. Redondo, A. Rodriguez, E. Bahia, A. Falqués, V. Gracia, A. Sánchez-Arcilla and M. J. F. Stive, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p350-365.

Spectral Representation of High-Frequency Space Shuttle Data, P. D. Spanos, L. J. Mushung, D. A. Nelson, Jr. and D. A. Hamilton, AS July 94, p315-327.

Digital terrain model

Combination of an Automated Channel Network Extracting System and a Distributed Watershed Model in Estimation Rainfall-Runoff Processes, Ray-Shyan Wu, Yi-Shao Lai and Cheng-Hsung Liu, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p356-360.

Determination of Watershed Features for Surface Runoff Models, N. K. Garg and D. J. Sen, HY Apr. 94, p427-447

Dikes

Seepage through Dike Walls of the Chicago Confined Disposal Facility, D. D. Reible, S. A. Savant-Malhiet, L. J. Thibodeaux, K. T. Valsaraj and T. E. Myers, (*Peedging '94*, E. Clark McNair, Jr., ed., 1994), p1490-1496.

Soft Dikes an Answer to Stone-Dike Collisions, CE Sept. 94, p20-21.

Dilatancy

- Heterogeneous Hardening Plasticity Model for Concrete, H. C. Chan, Y. K. Cheung and Y. P. Huang, ST Jan. 94, p46-62.
- Interface Model Applied to Fracture of Masonry Structures, Hamid R. Lotfi and P. Benson Shing, ST Jan. 94, p63-80.
- Setup and Relaxation in Glacial Sand, Donald L. York, Walter G. Brusey, Frank M. Clemente and Stephen K. Law, GT Sept. 94, p1498-1513.

Dilatometer tests

Estimation of Settlements of Shallow Foundations, M. Surendra, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p153-156.

P-y Analysis of Laterally Loaded Piles in Clay Using DMT, M. A. Gabr, T. Lunne and J. J. Powell, GT May

94, p816-837.

Predicting Shallow Foundation Settlement in Sands from DMT, D. L. Skiles and F. C. Townsend, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p132-142.

Predictions of Shallow Foundation Behavior for Settlement '94, Storer J. Boone, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p168-172.

UF Spread Footing Prediction, F. C. Townsend, P. Ruesta and R. Morgan, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p182-185.

Dilution

Field Tests on Small Marine Outfall, James J. Sharp, EE Mar./Apr. 94, p471-477.

Initial Dilution of Southeast Florida Ocean Outfalls, John R. Proni, Hening Huang and William P. Dammann, HY Dec. 94, p1409-1425.

Dimensional analysis

Lateral Load Analysis of Single Piles and Drilled Shafts, J. Michael Duncan, Leonard T. Evans, Jr. and Phillip S. K. Goi, GT June 94, p1018-1033.

Principal Components Time Spectra of Suspended Sediment in Random Waves, Onyx W. H. Wai, Keith W. Bedford and Sean T. O'Neil, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p.296-305.

A Self-Balancing Laminate, Jozsef Bodig, Robert T. Brooks and Allan G. Burk, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p689-604

Dimensions

Range Determination Using Target Images, Fouad A. Ahmed, SU Nov. 94, p135-144.

Specimen Geometry and Toughness of Steel-Fiber-Reinforced Concrete, Lianrong Chen, Sidney Mindess and Dudley R. Morgan, MT Nov. 94, p529-541.

Dioxin

Dioxin Capping Management and Monitoring Program: Design and Implementation, Brian May, Douglas Pabst and Scott McDowell, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1027-1036.

The Dioxin Capping Project at the NY Mud Dump Site, Scott McDowell, Brian May and Douglas Pabst, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1270-1277.

Dioxin Contamination in Sediments of the Port of New York and New Jersey: The Search for Criteria, John F. Tavolaro and Joseph Olha, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p150-159.

Disposal of Contaminated Sediments in NY/NJ Harbor, Joel A. Pecchioli, (*Dredging '94*, E. Clark McNair, Jr.,

ed., 1994), p606-615.

Innovative Treatment of Soil Contamination: Radiolytic Destruction of Dioxin and Co-Contaminants by Cobalt-60, Roger J. Hilarides and Kimberly A. Gray, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p733-750.

Modeling Cap Placement at New York Mud Dump Site, Robert E. Randall, James E. Clausner and Billy H. Johnson, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994),

p1295-1304.

Ocean Disposal with Capping of Dioxin Contaminated Sediment: New York Case History #1, Monte Greges, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1278-1284.

Subbottom Profiling of a Sand Capped Disposal Mound, Peggy Murray, Mary Wiley, Douglas Pabst and Brian May, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1285-1294.

Disaster relie

Lessons Learned from the Hurricanes of 1992, Ronald A. Cook, Mehrdad Soltani and Timothy A. Reinhold, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p799-802.

Tentative Provisions for the Development of Seismic Regulations for Buildings, Roland L. Sharpe, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p116-121.

Disasters

Catastrophic Hurricanes May Become Frequent Events in Caribbean and Along the United States East and Gulf Coasts, Robert C. Sheets, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p37-50.

Critical Issues in Post Disaster Code Enforcement, Wilson C. Barnes and Jose D. Mitrani, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p284-293.

Debris Removal Operations Following Hurricane Andrew, Rex M. Holmlin, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p539-547.

Disaster Debris Management and Diversion from Hurricane Iniki, Wayne Rifer, Brenda Osterhaug and Dale Burton, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p548-557.

Hurricane Iniki and Typhoon Omar Meteorology, Thomas A. Schroeder, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p84-91. Reducing the Risks of Severe Windstorm Disaster; an International Perspective, Alan G. Davenport, (Hurricanes of 1992: Lessons Learned and Implications for the Fu-ture, Ronald A. Cook, ed. and Mehrdad Sotani, ed.,

1994), p147-157.

Standardizing Wind Measurements for Documentation of Surface Wind Fields in Hurricane Andrew, Mark D. Powell, Samuel H. Houston and Timothy A. Reinhold, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p52-69.

Using Pen Computers in Post-Disaster Insurance Claim Settlements, Raja R. A. Issa, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2145-2148.

Discharge

Achieving Adequate BMP's for Stormwater Quality Management, Anne Jones-Lee and G. Fred Lee, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p524-531.

Analysis of the Causes and Triggering Events of Disastrous Torrent Flood, Milivoje Brajković and Zoran Gavrilo-vić, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p640-644.

Analysis of the Torrent Lava Flow Movement and Its Computations - One Example Applied Investigation of Disastrous Torrent Flood, Zoran Gavrilović, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p650-651.

Biological Upflow Fluidized Bed Denitrification Reactor Demonstration Project-Stamford, Ct. Jeannette Semon, Thomas Sadick, Dennis Palumbo, Richard Schede, Marylee Santoro, Maryin Schneider and Steven Lesando, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p428-435.

Circulation and Flushing in Casco Bay, Maine, Bin Gong and Bryan R. Pearce, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1039-1046.

Coarse Sediment Transport and the Maintenance of Fish Habitat in the Upper Colorado River, John Pitlick, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p855-859.

Computation of Transverse Mixing In Streams, Alexander C. Demetracopoulos, EE May/June 94, p699-706.

Costs and Benefits of Meeting the San Francisco Bay Copper Objective by Regulating Small Treatment Plants, Steven X. McHaney, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1232-1236.

Design of Manning's-Rougness-Coefficient Study in New York State, William F. Coon, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p677-681.

Discharge-Frequency Relationships in Distributary Flow Systems, Edward R. Mifflin, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p1085-1089.

Effects on River Mechanics Due to Reduction in Low-Season Discharge, E. V. Richardson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p115-119.

Evaluating an Autoregressive Model for Stream Flow Forecasting, Yuan Cheng, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p1105-1109.

Factors Affecting Accuracy of Slope-Area Discharge De-termination of the September 1992 Flood in Raven Fork, Western North Carolina, W. Harold Eddins and Thomas J. Zembrzuski, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p645-649.

Fish Entrainment and Strategies for Diversion, Andrew R. Blystra, Dennis J. McCauley and John E. Navarro, (Hydraulic Engineering) '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p447-451.

Floodflow Effects on Riparian Vegetation in Arizona, J. V. Phillips and H. W. Hjalmarson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p707-711. Historic-Flood Evaluation and Research Needs in Mountainous Areas, Robert D. Jarrett, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p875-879.

Historical Rainfall-Runoff Analysis Using the Antecedent Precipitation Index, B. J. Doeing, R. A. Gaines and T. M. James, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1095-

Historical Trends in Flood Discharges on the Upper Mississippi River, H. Vernon Knapp, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p618-622

Luo, Ming, Weilin Xu and Huasheng Liao, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R.

Rumer, ed., 1994), p1009-1013.

Mixing of Thermal Discharges at Low Froude Numbers, C. Liang Lee and Patrick J. Ryan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p538-542.

Modeling Horizontal Round Buoyant Jets in Shallow Water, A. J. Johnston, C. R. Phillips and R. E. Volker,

HY Jan. 94, p41-59.

Modeling Initial Mixing of Ocean Wastewater Discharges to Develop Toxic Effluent Limitations, Christopher C Obropta and Scott T. Taylor, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1047-1054.

neceing, Small Rozelmeh, ed., 1994), p1047-1054. Problems with Indirect Determinations of Peak Streamflows in Steep, Desert Stream Channels, Patrick A. Glancy and Rhea P. Williams, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p635-639.

Recalibration of Parshall Flumes at Low Discharges, Steven J. Wright, Blake P. Tullis and Tamara M. Long, IR Mar./Apr. 94, p348-362.

Relation Between Largest Known Flood Discharge and El-evation in Montana, Charles Parrett and Stephen R. Holnbeck, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p870-

Reservoir Sediment Removal: Hydrosuction Dredging, Rollin H. Hotchkiss and Xi Huang, (Hydraulic Engi-neering '94, George V. Cotroneo, ed. and Ralph R. Ru-mer, ed., 1994), p1020-1024.

Sandbar Formation in Side-Diversion Channels, Vincent Neary, Brian Barkdoll and A. Jacob Odgaard, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1171-1175.

Sensitivity and Probabilistic Analyses of the Impact of Climatic Conditions on the Infiltration Rate in a Variable Saturated Multilayered Geologic Medium, A. Berge Gureghian, Aaron R. DeWispelare and Budhi Sagar, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1622-1633.

Stratified Cooling Channel for Thermal Discharges, R. E.

Baddour, EE Jan./Feb. 94, p242-253.

Supercritical Flows Versus Subcritical Flows in Natural Channels, Douglas J. Trieste, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p.732-736.

Utilizing Mathcad for Hydraulic Design of Stormwater Pump Stations, T. Chris Evensen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p814-821.

Velocity Measurements by the "One-Orange Method", B. A. Christensen, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p76-85.

Where is the Pendulum Now? Do We Really Know? D. R. Wheeler, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p155-167.

Discharge coefficients

Automated Field Irrigation System Using Side Weirs, R. Singh and T. Satyanarayana, IR Jan./Feb. 94, p48-59.

Characteristics of Circular-Crested Weir, Amruthur S. Ramamurthy and Ngoc-Diep Vo, HY Sept. 93, p1055-1062

Discharge Coefficient of Rectangular Side Weirs, R. Singh, D. Manivannan and T. Satyanarayana, IR July/Aug. 94, p814-819.

Momentum Model of Flow Past Weir, Amruthur S. Ramamurthy, Ngoc-Diep Vo and German Vera, IR Nov./Dec. 92, p988-994.

Practical Constant-Accuracy Linear Weir, K. Keshava Murthy and M. N. Shesha Prakash, IR May/June 94, p550-562. Side-Weir Analysis Using Elementary Discharge

Coefficient, Prabhata K. Swamee, Santosh K. Pathak and Masoud S. Ali, IR July/Aug. 94, p742-755.

Subcritical Flow Over Rectangular Side Weir, Prabhata K. Swamee, Santosh K. Pathak, Mukesh Mohan, Sanjai K. Agrawal and Masoud S. Ali, IR Jan./Feb. 94, p212-217.

Using Drop Structures for Stream Gaging, Bobby J. Brown, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p21-26.

Discharge measurement Broad-Crested Weir, Willi H. Hager and Markus Schwalt, IR Jan./Feb. 94, p13-26.

Comparison of Current Meters Used for Stream Gaging, Janice M. Fulford, Kirk G. Thibodeaux and William R. Kaehrle, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p376-385.

A Computerized Open Channel Flow Measurement Device, Stan E. Malinky, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation,

Clifford A. Pugh, ed., 1994), p27-36. Intelligent Decision Support System for Stage Discharge Analysis, Slobodan P. Simonovic, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p283-286.

Methods for Measuring Discharge under Ice Cover, John F. Walker, HY Nov. 94, p1327-1336.

Parameter Regionalization of a Daily Baseflow Runoff Model, Paolo Bartolini and Juan B. Valdés, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p97-101.

Recalibration of Parshall Flumes at Low Discharges, Steven J. Wright, Blake P. Tullis and Tamara M. Long, IR Mar./Apr. 94, p348-362.

Recent Applications of Acoustic Doppler Current Profilers, K. A. Oberg and David S. Mueller, (Fundamentals and Advancements in Hydraulic Measurements and Experi-

mentation, Clifford A. Pugh, ed., 1994), p341-350.
Results of Parshall Flume Test, Fred W. Blaisdell, IR Mar./Apr. 94, p278-291.

Using the Weir Back as an Energy Dissipator, Abdelkawi Khalifa, (Hydraulic Engineering '94, George Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p436-441.

Discontinuities

Discontinuous Control of Seismic-Excited Nonlinear and Hysteretic Structures, J. N. Yang, Z. Li and J. C. Wu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p393-398.

Finite-Element Analysis of Elastoplastic Discontinuities, Paul Steinmann and Kaspar Willam, EM Nov. 94, p2428-2442.

Discrete elements

Discrete Modeling of Soil-Structure Interaction Under Dynamic Loading, Grzegorz Bak, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p873-876.

Discrete-Element Method for Simulating Behavior of Co-

hesive Soil, A. Anandarajah, GT Sept. 94, p1593-1613

Discretization Influence on Regularization by Two Localization Limiters, Antonio Huerta and Gilles Pijaudier-Cabot, EM June 94, p1198-1218.

A Goal Driven Approach to Discrete Event Simulation, Abdullah M. Alsugair and David Y. Chang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p515-522

Hybrid Finite Element/Discrete Element Model for Large Deformation Geotechnical Engineering Problems, Isao Ishibashi, Tarun K. Agarwal and You Wang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p857-864.

Modeling Fracture in Cemented Granular Materials, B. C. Trent and L. G. Margolin, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p54-69.

Modeling Viscoelastic Behavior of Hot Mix Asphalt (HMA) Using Discrete Element Methods, Jay Namunu Meegoda and K. George Chang, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p804-811.

New Perspectives on Soil Creep, Matthew R. Kuhn and James K. Mitchell, GT Mar. 93, p507-524.

Numerical Simulations of Monotonic and Cyclic Loading of Granular Soil, Tang-Tat Ng and Ricardo Dobry, GT Feb. 94, p388-403.

Chemical Inactivation of Cryptosporidium Parvum in Drinking Water, Gordon R. Finch and E. Kathleen Black, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p42-49.

Cryptosporidium and the Milwaukee Incident, Kim R. Fox and Darren A. Lytle, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p50-57.

Disinfectants

Alternative Disinfectants for Drinking Water Treatment, Benjamin W. Lykins, Jr., Wayne E. Koffskey and Kathleen S. Patterson, EE July/Aug. 94, p745-758.

DBP and Hardness Control by Membrane Filtration,

Charles D. Turner and Srinivasa R. Kadubandi, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p344-351. The ICR; \$130 Million of Water Quality Monitoring, Al-

bert Ilges and Fredrick W. Pontius, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p788-791.

Nation-Wide Bromide Occurrence and Bromate Formation Potential in Drinking Water Supplies, P. Westerhoff, M. Siddiqui, J. Debroux, W. Zhai, K. Ozekin and G. Amy, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p670-

The Use of SCADA for Real-time Calculation and Monitoring for CT Compliance at the Ralph D. Bollman Water Treatment Plant, Peter Schoemann and Peter Martin, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2112-2123.

Biofilm Sorption of Natural Organic Material, Gary Carlson and JoAnn Silverstein, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p460-466.

Control of Disinfection By-Products in Drinking Water, Philip C. Singer, EE July/Aug. 94, p727-744. DBP Control in Drinking Water: Cost and Performance,

Robert M. Clark, Jeffrey Q. Adams and Benjamin W.

Lykins, Jr., EE July/Aug. 94, p759-782.

Effect of Aggregation on Vibrio Cholerae Inactivation, Robert M. Clark, Eugene W. Rice, Bennett K. Pierce, Clifford H. Johnson and Kim R. Fox, EE July/Aug. 94,

Evaluation of Enhanced Coagulation for DBP Control, Richard J. Miltner, Sheila A. Nolan, Marcus J. Dryfuse and R. Scott Summers, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p484-491.

The ICR; \$130 Million of Water Quality Monitoring, Albert Ilges and Fredrick W. Pontius, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p788-791

Kinetics of Ozone Disinfection in Completely Mixed System, Hongde Zhou and Daniel W. Smith, EE July/Aug. 94, p841-858.

Measurement and Automatic Control of Chlorination, Robert Hill and James Martin, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p718-725.

Modeling Chlorine Residuals in Drinking-Water Distribution Systems, Lewis A. Rossman, Robert M. Clark and Walter M. Grayman, EE July/Aug. 94, p803-820.

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Modeling of Dissolved Ozone Concentration Profiles in Bubble Columns, Hongde Zhou, Daniel W. Smith and S. J. Stanley, EE July/Aug. 94, p821-840.

Ozonation as an Alternative to Mandatory Filtration, Dimitios Katehis, Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p384-391.

Removal of Bromate After Ozonation by Electron Beam Irradiation, M. Siddiqui, G. Amy, W. Cooper, C. Kurraand T. Waite, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), 054-661.

U.S. Drinking-Water Regulations: Treatment Technologies and Cost, Benjamin W. Lykins, Jr. and Robert M. Clark, EE July/Aug. 94, p783-802.

Dispersion

- Conservative Characteristics-Based Schemes for Mass Transport, C. W. Li and T. S. Yu, HY Sept. 94, p1089-1000
- Contaminant Fate and Transport Model in Pool-and-Riffle Streams, Il Won Seo, Dae Young Yu and Jae-Hyung Lee, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p165-169.
- Different Methods to Compute Pollutant Dispersion Around Buildings, R. Panneer Selvam and Alan H. Huber, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p92-98.
- Dispersivity in Heterogeneous Permeable Media, Dwayne A. Chesnut, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1822-1841.
- Dredged Material Dispersion from the Vicinity of a Pipeline Discharge, Tylers Beach, Virginia, Allen Teeter, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p918-927
- DREDGMAP: A PC Based System to Predict the Fate of Dredged Material, J. Craig Swanson, Malcolm L. Spaulding and Tatsusaburo Isaji, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p200-209.
- Estimation of Dispersion Coefficients from Particle Tracks, David A. Chin, EE Jan./Feb. 94, p256-263.
- High-Resolution Upwind Schemes for Solving Mass Transport Equation, Jihn-Sung Lai, Hsieh Wen Shen and Dihua Zhao, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p497-501.
- How Should the Migration and Retardation of Colloids be Characterized? Peter Grindrod, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p.2709-2718.
- The Impacts of Roughness Bars on the Mixing Processes, Jianlu Xu and Hsieh Wei Shen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p533-537.
- Monitoring of a dredging operation using innovative sediment tracing techniques, Jonathan Marsh, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1360-1369.
- New Techniques for Experimental Studies for Dredged Material Dispersion, Philip J. W. Roberts, Adrian Ferrier and B. H. Johnson, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1192-1200.
- Numerical Studies of Radionuclide Migration in Layered Porous Media, Robert L. Buckley, Sudarshan K. Loyalka and M. M. R. Williams, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1842-1847.
- QUAL2E Simulations of Pulse Loads, Raymond Walton and Mary Webb, EE Sept./Oct. 94, p1017-1031.
- Wind-Driven Dispersion in New Jersey Coastal Waters, A. K. M. Quamrul Ahsan, Michael S. Bruno, Lie-Yauw Oey and Richard I. Hires, HY Nov. 94, p1264-1273.

Displacement

Displacement of Batter Piles in Layered Soil, A. S. Yalcin and G. G. Meyerhof, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p975-985.

- Displacement of Landmark Building Resulting from Adjacent Construction Activities, Jacek K. Leznicki, Robert G. Gaibrois and Melvin I. Esrig, (Vertical and Inorizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p222-232.
- Dynamic Stability of Imperfect Frames Under Joint Displacements, D. S. Sophianopoulos and A. N. Kounadis, EM Aug. 94, p1661-1674.
- Evaluation of Dynamic Compaction of Low Level Waste Burial Trenches Containing B-25 Boxes, Scott R. McMullin. (*In-Situ Deep Soil Improvement*, Kyle M. Rollins, ed., 1994), p44-54.
- Fracture Behavior of Cement Grouted Sand, C. Vipulanandan, A. Ata and S. Mebarkia, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p147-159.
- Geosynthetic Loads in Landfills Slopes: Displacement Compatibility, J. H. Long, R. B. Gilbert and J. J. Daly, GT Nov. 94, p2009-2025.
- Hygrothermal Effects in Composite Sandwich Panels, Charles E. S. Ueng and Jonathan D. Sherrill, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p306-315.
- Investigation of Performance of Bridge Abutments in Seismic Regions, Raj Siddharthan, Mahmoud El-Gamal and Emanuel A. Maragakis, ST Apr. 94, p1327-1346.
- New Methodology for Seismic Design of RC Shear Walls, John W. Wallace, ST Mar. 94, p863-884.
- Performance of Fill that Contains Organic Matter, Robert W. Day, CF Nov. 94, p264-273.
- Predicted and Measured Behavior of Five Spread Footings on Sand, Geotechnical Special Publication No. 41, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994, 0-7844-0025-3, 230pp.
- Predicting the Load-Displacement Behaviour of Spread Footings on Sand, Guido Gottardi and Paolo Simonini, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), P236-239.Preliminary Results of Paleoseismic Investigations of Qua-
- Preliminary Results of Paleoseismic Investigations of Quaternary Faults on Eastern Yucca Mountain, Nye County, Nevada, C. M. Menges, J. R. Wesling, J. W. Whitney, F. H. Swan, J. A. Coe, A. P. Thomas and J. A. Oswald, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2373-2390.
- SDC Detector Foundation Requirements for the SSC, J. L. Western, M. W. Butalla, H. James Krebs and Gary W. Tulk, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p767-772.
- Seismic Response of Concrete Tilt-Up Systems, Sharon L. Wood and Neil M. Hawkins, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1484-1489.
- A Shape-Finding Finite Element Analysis for an Equally-Stressed Surface in Membrane Structures, T. J. Kwun, S. Y. Sur and H. W. Cho, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p724-731.
- A Smoother Ride to Vibration Damping, CE May 94, p13-
- Stress and Displacement of Thick Doubly Curved Laminated Shells, Chih-Ping Wu and Chi-Chuan Liu, EM July 94, p1403-1428.
- Structural Character of the Northern Segment of the Paintbrush Canyon Fault, Yucca Mountain, Nevada, Robert P. Dickerson and Richard W. Spengler, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2367-2372.
- Structural Shape Analysis under the Prescribed Displacement Mode, Yasuhiko Hangai and Kazuaki Harada, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p694-703.
- Surface Settlement Due to Shear Stresses at Depth, Madhira R. Madhav and N. Kumar Pitchumani, GT July 94, p1205-1210.

Thermal Stresses in Piezoelectric Materials: A Boundary Integral Formulation, J. S. Lee and L. Z. Jiang, (Engineering, Construction, and Operations in Space IV. Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994),

Thin-Walled Curved Beams. I: Formulation of Nonlinear Equations, Young J. Kang and Chai H. Yoo, EM Oct. 94, p2072-2101.

Thin-Walled Curved Beams. II: Analytical Solutions for Buckling of Arches, Young J. Kang and Chai H. Yoo,

EM Oct. 94, p2102-2125

The Tip Displacement of Drilled Shafts in Sands, V. N. Ghionna, M. Jamiolkowski, S. Pedroni and R. Salgado, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1039-1057.

Uplift Load-Displacement Behavior of Grillage Foundations, Fred H. Kulhawy and Harry E. Stewart, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed.,

1994), p233-244.

Displacements

Damage Detection in Structures Based on Feature-Sensitive Neural Networks, Z. Peter Szewczyk and Pra-bhat Hajela, CP Apr. 94, p163-178.

Doe's Topical Report on a Methodology to Assess Vibra-tory Ground Motion and Fault Displacement Hazards at the Yucca Mountain Site, David F. Fenster and Richard C. Quittmeyer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2260-2265.

hp Version of Finite-Element Mixed Method, Michelle M. Crull and P. K. Basu, EM Nov. 94, p2342-2360.

Structural Analysis for Structural Design, D. E. Grierson, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p133-144.

Analysis of Dredged Material Placed in Open Water, B. H. Johnson, N. W. Scheffner, A. M. Teeter, E. B. Hands and H. R. Moritz, (*Dredging '94*, E. Clark McNair, Jr., ed.,

1994), p18-27

Assessing Effects for Disposal Sites off San Francisco, Peter Hamilton and Allan Y. Ota, Estuarine and Coast-al Modeling III, Malcolm L. Spaulding, ed., Keith Bed-ford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p14-28.

Dredged Material Disposal and Migratory Birds, Les E. Weigum, (Dredging '94, E. Clark McNair, Jr., ed.,

1994), p1380-1387.

Evaluation of Remedial Options for the Sitcum Waterway Sediments: A Case Study, John R. Verduin, III, Garry E. Horvitz and Richard C. Gilmur, (*Dredging '94*, E. Clark

McNair, Jr., ed., 1994), p555-566. Evolution of Beneficial Uses of Dredged Materials for Over 200 Million Cubic Yards of Dredged Materials for Over 200 Million Cubic Yards of Dredged Material in Galveston Bay, Texas Part II - Framework & Approach, Mike Jansky, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p843-846.

Management of Dredged Material Disposal for San Francisco Bay Projects, Thomas H. Wakeman and Jacob Harari, (Dredging '94, E. Clark McNair, Jr., ed., 1994),

New Bedford Harbor, Massachusetts Dredging/Disposal of PCB Contaminated Sediments, Mark J. Otis, (*Dredging* '94, E. Clark McNair, Jr., ed., 1994), p579-587.

Physical Design Aspects of Capping Projects, James E. Clausner, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1132-1141.

Puckette, Paul, Michael Tubman and Blair Brumley, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p86-95.

Sediment and Debris Removal Inlet Structure for Canal Pipelines, Gilbert Horrocks, H. Lee Wimmer and Pam McMullin, IR May/June 94, p607-616.

Sediment Remediation: An International Review, Daniel E.

Averett and Norman R. Francingues, Jr., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p596-605. Technical Guidelines for Dredged Material, Norman R. Francingues, Jr. and Michael R. Palermo, (Dredging '94, p596-605). E. Clark McNair, Jr., ed., 1994), p616-625.

Dissipation

Characterization of an ER Active Member, Henri P. Gavin and Robert D. Hanson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p863-868.

Damping Systems for Controlling Wind Induced Motions of Structures, Ahsan Kareem and Yukio Tamura, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p845-850.

Water Waves Above Submerged Porous Plate, Xiping Yu and Allen T. Chwang, EM June 94, p1270-1282.

Wave Motion Through Porous Structures, Xiping Yu and Allen T. Chwang, EM May 94, p989-1008.

Dissolved organic carbon

Biological Colonization of Granular Activated Carbon Filters in Drinking-Water Treatment, Pierre Servais, Gilles Billen and Pascale Bouillot, EE July/Aug. 94, p888-899.

CDR - A Chemical Solution to a Mechanical Problem, Gary E. Blizzard, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p172-181.

Trihalomethanes in Chlorinated Sacramento-San Joaquin Delta Drinking Water Simulated with the EPA WTP-THM Model, Russ T. Brown, Doug Brewer, Doug Owen and Zaid Chowdhury, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p492-500.

Dissolved oxygen

Agitation Dredging Environmental Study, Larry M. Stuber and Elizabeth A. Day, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p76-85.

A Coupled GIS-Water Quality Modeling System, Chen-Yu Cheng, J. F. Atkinson and J. V. DePinto, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p247-251.

Effect of Roughness and Thickness of Biofilms on External Mass Transfer Resistance, Tian C. Zhang, Paul L. Bish-op and James T. Gibbs, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p593-600.

Macro-Roughness Effects on Stream Reaeration, Douglas B. Moog and Gerhard H. Jirka, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p994-998.

Modeling Full-Scale Diffused Aeration Systems, Terry L. Johnson and Ross E. McKinney, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p702-709.

Non-Point Pollution Loadings and their Impacts on Tennessee Valley Reservoirs, Julia Burr Avera and John A. Gordon, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1247-

Numerical Modeling of Advective and Diffusive Transport in the Rappahannock Estuary, Virginia, Kyeong Park and Albert Y. Kuo, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p461-474.

Regulation of Flow Downstream of Weirs, Boualem Hadjerioua, Tony Rizk, Emmett M. Laursen and Gary

Hauser, HY Mar. 94, p347-360.

Reservoir Sediment Removal: Hydrosuction Dredging, Rollin H. Hotchkiss and Xi Huang, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1020-1024.

Salinity and Dissolved-Oxygen Dynamics in a Wind-Driven Estuary, Jerad D. Bales and R. G. Garrett, (Hy-draulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1311-1315.

Stratified Flow in an Impounded Inland River, Emmet M. Owens and William R. Naumann, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer,

ed., 1994), p569-573.

Testing Turbine Aeration for Dissolved Oxygen Enhancement, Tony L. Wahl, Jerry Miller and Doug Young, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p425-434.

Dissolved solids

Comparison of Uranium Dissolution Rates From Spent Fuel and Uranium Dioxide, S. A. Steward and W. J. Gray, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2602-2608.

In Situ Photothermal Deflection Spectroscopy of Uranium Dioxide Dissolution, James D. Rudnicki, Richard E. Russo and David W. Shoesmith, (High Level Radioactive Waste Management, High Level Radioactive Waste

tive Waste Management, High Level Radioactive Waste Program Committee, 1994, p.2609-2615.

Interlaboratory Comparison of UO: Dissolution Rates, W. J. Gray, J. C. Tait, S. A. Steward and D. W. Shoesmith, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), 23621-23621. p2597-2601.

Distance measuring

Heuristic Algorithm to Locate Solid-Waste Disposal Site, Narayanaswamy V. Ramu and William J. Kennedy, UP Mar. 94, p14-21.

Survey Distance Units: A Better Way, Larry E. Stanfel, SU

Aug. 94, p130-132.

Using GPS to Improve Existing Classical Network, Szu-Pyng Kao and J. S. Bethel, SU May 94, p77-91.

Distortion

Parameters Affecting Distortional Buckling of Tapered Steel Members, Hamid Reza Ronagh and Mark Andrew Bradford, ST Nov. 94, p3137-3155.

Rotational Centers of Plates Regulating Distortion of Box Girders, Tsuneo Usuki, ST Sept. 94, p2602-2622.

Distributed processing

Adaptive Space Station Technologies and Systems for a Lunar Surface Return Mission, Larry Toups and Sam Ximenes, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p483-493.

An Automated Environment for Parallel Computing, E. D. Sotelino, D. W. White and W. F. Chen, (Analysis and

Computation, Franklin Y. Chen, (Analysis and Computation, Franklin Y. Chen, ed., 1994), p193-202. de St-Venant Channel Routing in Distributed Watershed Modeling, Fred L. Ogden, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p492-496.

Distribution

Wave-Height Distribution in Storm Sea: Effect of Wave Breaking, Malcolm O. Green, WW May/June 94, p283-

Distribution functions

Approximating the Imbibition and Absorption Behavior of a Distribution of Matrix Blocks by an Equivalent Spherical Block, Robert W. Zimmerman and Gudmundur S. Bodvarsson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2030-2037.

Evaluation of Six Methods for the LP3 Distribution, Fang Xin Yu and Babak Naghavi, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p1080-1084.

Intercomparison of Extremal Wave Analysis Methods Using Numerically Simulated Data, Yoshimi Goda, Peter Hawkes, Etienne Mansard, Maria Jesus Martin, Martin Mathiesen, Eric Peltier, Edward Thompson and Gerbrant van Vledder, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p963-97

IPA Phase 2 Sensitivity and Uncertainty Analysis, Virginia Colten-Bradley, Richard Codell and M. Rose Byrne, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p1480-1491.

Distribution patterns Analyzing Larval Fish Distributions Using Hydrodynamic and Transport Modelling, John Eric Edinger, Edward M. Buchak and Michael D. McGurk, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p536-550.

Bidding Model for Refurbishment Work, Teo Ho Pin and

W. F. Scott, CO June 94, p257-273.

Disturbances

Next Generation Space Telescope. I: Design Considera-tions, B. Scott May and Nicholas P. Jones, AS Oct. 94, p355-374.

Next Generation Space Telescope. II: Proposed Pointing Control System, B. Scott May and Nicholas P. Jones, AS Oct. 94, p375-397.

Ditches

Performance of Gunite Brow Ditches, Robert W. Day, IR Sept./Oct. 94, p957-963.

Season Discharge, E. V. Richardson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), pl 15-119.

Flow and Sediment Transport at River Diversions, Yalin Wang, Brian Barkdoll and A. Jacob Odgaard, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph

R. Rumer, ed., 1994), p1060-1064.

Lake Michigan Diversion at Chicago, William H. Espey, Jr., Oscar G. Lara and Robert L. Barkau, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p175-181.

Sandbar Formation in Side-Diversion Channels, Vincent Neary, Brian Barkdoll and A. Jacob Odgaard, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1171-1175.

Diversion structures

A Better Description of Trap Efficiency for Fine Sediment in Horizontal Settling Basins, Shaohua Marko Hsu and Wei-Sheng Yu, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1186-1192

A Fish Bypass Screen at Puntledge Project, Herbert Louie, John Taylor and Larry J. Swenson, (*Hydraulic Engineering* '94, George V. Cotroneo, ed. and Ralph R. Rumer,

ed., 1994), p442-446.

Fish Entrainment and Strategies for Diversion, Andrew R. Blystra, Dennis J. McCauley and John E. Navarro, (Hy-

Blystra, Dennis J. McCauley and John E. Navarro, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p447-451.

Optimizing River Diversion under Hydraulic and Hydrologic Uncertainties, Abbas Afshar, Ahmad Barkhordary and Miguel A. Mariño, WR Jan./Feb. 94, p36-47.
Side-Weir Analysis Using Elementary Discharge Coefficient, Prabhata K. Swamee, Santosh K. Pathak and Mascaud S. Ali J. Pluly/Ann. 94, 747, 755 Masoud S. Ali, IR July/Aug. 94, p742-755.

Subcritical Flow Over Rectangular Side Weir, Prabhata K. Swamee, Santosh K. Pathak, Mukesh Mohan, Sanjai K. Agrawal and Masoud S. Ali, IR Jan./Feb. 94, p212-217.

Hydrologists Find a Home in ASCE as Two 'Wet' Divisions Get Set to Merge, NE Apr. 94, p3.

Specifying and Attaining Acceptable Marina Tranquility, Jack C. Cox, (Marinas, Parks and Recreation Develop-ments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p470-479.

Documentation

Applying Multimedia Technology to Project Control, L. Y. Liu, A. L. Stumpf and S. S. Kim, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p608-613.

Computer Use QA Documentation for Compliance with ISO-9000, Vyomesh Vora, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1812-1815.

Creating Construction Documents from 3-D Computer Models, Margaret T. Neggers, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1326-1331.

A Multi-Media System for Organizing Construction Documents, Rajaram Ganeshan, Simon Kim, Liang Liu and

mems, Kajaram Ganesnan, Simon Kim, Liang Liu and Annette Stumpf, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1381-1388.

Overlaying Digital Images with 3-D CAD to Document as Built Construction, Karl A. Raynar and Gary R. Smith, (Computing in Civil Engineering, Khalil Khozeimeh, ed. 1994), 9751-759.

ed., 1994), p751-758.

Quality in Constructed Project: Surveying Engineering, Gunther Greulich, Wayne H. Valentine and R. R. Chamard, SU May 94, p52-61.

Standardizing Wind Measurements for Documentation of Surface Wind Fields in Hurricane Andrew, Mark D. Powell, Samuel H. Houston and Timothy A. Reinhold, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p52-69.

Strengthening the Design/Construction Interface Using Electronic Imaging, Document Management and Work Flow Technologies, Jorge A. Vanegas, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p600-607.

Dolomite

Kinetics of SO₂-Dolomite Reaction: Application of Random Pore Model, Sanjeev S. Tambe, Srinivas S. Yerrapragada and K. L. Gauri, MT Feb. 94, p65-77.

Dolos

Physical Model Tests of Dolos Impact Stresses, J. M. Stallings and J. W. Tedesco, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p67-72.

Scale and Modeling Effects in Concrete Armor Experiments, Jeffrey A. Melby and George F. Turk, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p686-700.

Domes, structural

Buckling of Single Layer Latticed Dome under Uniform Gravity Load, Masumi Fujimoto, Katsuhiko Imai and Toshitsugu Saka, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p509-518.

Cladding Goes Over Eggs Easy, CE Feb. 94, p77.

- Canding doctor leggs and provided in the control of Chaoqing Gymnasium, Fa-Kun Yao, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p642-651.
- Design of Low Rise Dome for the University of Hawaii at Manoa, Alfonso Lopez and Gerald, Orrison, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p393-400.

A Dome For the 21st Century, John Zils, Mark Sarkisian and Ahmad Abdelrazaq, CE Feb. 94, p36-39.

Dynamic Characteristics of Translational Lattice Domes, Celina U. Penalba, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p269-279.

Effect of Joint Rigidity on Buckling Strength of Single Layer Lattice Domes, Shiro Kato, Itaru Mutoh and Masaaki Shomura, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p469-478.

Effects of Spatial Triangulation on the Behavior of "Tensegrity" Domes, David M. Campbell, David Chen, Paul A. Gossen and Kris P. Hamilton, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p652-663.

Expandable Structures with Incorporated Roofing Elements, J. P. Valcárcel, F. Escrig and E. Martín, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p752-761.

Explorations in Geodesic Forms, Dimitra Tzourmakliotou, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed.,

1994), p440-449.

Field Measurements of Tensile Forces on a Spherical Dome Sector Caused by Internal Load of a Granular Product in Storage, Jack L. Brunk, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p172-179.

Flat Plates with Regular and Irregular Column Layouts.II: Numerical Evaluations, Kolbjorn Saether, ST May 94,

p1580-1598.

The Georgia Dome and Beyond: Achieving Lightweight -Longspan Structures, Matthys P. Levy, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p560-562. Georgia Dome Cable Roof Construction Techniques, Wesley R. Terry, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p563-572.

Glass-covered Lightweight Spatial Structures, Jörg Schlaich and Hans Schober, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed.

and Celina U. Penalba, ed., 1994), p1-27.

History and Development of Fabric Structures, R. E. Shaeffer, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p979-989.

Lower Bounds for Overall Buckling of Spherical Space Domes, M. Kashani and J. G. A. Croll, EM May 94,

p949-970.

Optimal Design Conception of Grid Domes in Practice, Xue-Ren Hu and Young-Feng Luo, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p430-439.

Possibilities and Problems of Latticed Structures, Mamoru Kawaguchi, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U.

Penalba, ed., 1994), p350-376.

Simulation Procedure for Buckling Behaviors of a Reticular Dome, Shiro Kato, Hideyuki Takashima, Isao Kubodera and Takashi Ueki, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p460-468.

Spherical Domes Subjected to Horizontal Earthquakes, Haruo Kunieda, Shigehiro Morooka and Koji Onodera, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed.,

1994), p229-238.

Structural Tests on the "Suspen-Dome" System, Mamoru Kawaguchi, Masaru Abe, Tatsuo Hatabo, Ikuo Tatemichi, Satoshi Fujiwara, Hiroaki Matsufuji, Hiroyuki Yoshida and Yoshimichi Anma, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p383-392.

A Study on Buckling Characteristics of Single-Layer Latticed Domes with the Initial Geometrical Imperfection, Hwan-Mok Jung, Young-Hwan Kwon and Moon-Myung Kang, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U.

Penalba, ed., 1994), p489-498.

Ultimate Loading Capacity of Braced Domes, X. Chen, N. Wang and S. Z. Shen, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p539-546.

What Controls the Ultimate Load of a Glulam Dome? S. M. Holzer, S. A. Kavi, S. Tongtoe and J. D. Dolan, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p86-96.

Doppler systems

An Investigation of Turbulence in Open Channel Flow via Three-component Laser Doppler Anemometry, Mahalingam Balakrishnan and Clinton L. Dancey, Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p159-175.

New Acoustic Meter for Measuring 3D Laboratory Flows, Nicholas C. Kraus, Atle Lohrmann and Ramon Cabrera,

HY Mar. 94, p406-412.

Spectral Analysis of Fluid Flow in Oscillating Grid Reactor, Leonard W. Casson, Desmond F. Lawler and David G. Bogard, EM Feb. 94, p346-367.

Wave-Induced Forces on Armor Unit on Berm Breakwaters, Alf Tørum, WW May/June 94, p251-268.

Downle

The Challenge of Housing the Largest Detector, Prabir Das, C. J. Roth and Nachum Secker, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p755-760.

Mechanical Behavior of Dowels Embedded in Concrete, Luigi Biolzi and Natalino Gattesco, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p630-635. Steel-Concrete Interaction by Means of Film Sensors, Marco di Prisco and Alessandro Gandelli, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p815-820.

Downdrag

Down Drag on Friction Piles: A Case History, Yalcin B. Acar, R. Richard Avent and Mohd R. Taha, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p986-999.

Downdrag on Piles: Review and Recent Experimentation, John Anthony Little, (Vertical and Horizontal Deforma-tions of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1805-1826.

The Effect of Live Load on Downdrag Forces, Samuel A. Leifer, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and

Guy Y. Félio, ed., 1994), p949-961.

Measured Downdrag on Seven Coated and Uncoated Piles in New Orleans, Randall K. Bush and Jean-Louis Briaud, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1011-1027.

Nonlinear Three Dimensional Analysis of Downdrag on Pile Groups, Sangseom Jeong and Jean-Louis Briaud, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y.

Félio, ed., 1994), p1366-1384.

Brhavior of Hydraulic Jump Basins, Boualem Hadjerioua, Emmett M. Laursen and Margaret S. Petersen, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p416-420.

Forces on Vibrating Cylinder Near Wall in Current and Waves, B. M. Sumer, J. Fredspe, B. L. Jensen and N. Christiansen, WW May/June 94, p233-250.

Measurements of the Hydrodynamic Lift and Drag Forces

Measurements of the Hydrodynamic Lift and Drag Forces Acting on Riprap Side Slope, A. F. Ahmed and F. S. El-Gamal, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p331-340.

New Airfoil-Design Concept with Improved Aerodynamic Characteristics, Demeter G. Fertis, AS July 94, p328-

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Drag coefficient

The Impacts of Roughness Bars on the Mixing Processes, Jianlu Xu and Hsieh Wei Shen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p533-537.

A Probabilistic Approach to the Response of Tall Buildings to Wind Loadings, Morteza A. M. Torkamani and Ramadan S. Murad, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1439-1444.

Unexploded Ordnance (UXO) and Dredging, Timothy Welp, James Clausner, Raymond Pilon, Joan Pope and Richard Lewis, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p48-55.

Drainage

America's Pavements: World's Longest Bathtubs, Harry R. Cedergren, CE Sept. 94, p56-58.

Design of Agricultural Drainage with Adaptive Irrigation Management, Luis A. Garcia, Kenneth M. Strzepek and Terence H. Podmore, IR Jan./Feb. 94, p179-194.

Drawdowns for Leaky-Aquifer Flow with Storage in Fi-nite-Width Sink, Louis H. Motz, IR July/Aug. 94, p820-

Dry Weather Stormwater Management - Yakima, WA, John R. Genskow, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry

N. Tuvel, ed., 1994), p123-126.

Heavy Metal Removal Using Peat/Wetland Treatment, Suzanne Murawski, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p408-414.

Hydrodiplomacy on Forester Creek, Lisa T. M. Vomero-Inouye, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p557-560.

Indestructible Drainpipes, ET June/July 94, p11.

Jury Verdict: Frequency versus Risk-Based Culvert De-sign, Gary L. Lewis, WR Mar./Apr. 92, p166-184.

Late Cenozoic Evolution of Fortymile Wash: Major Change in Drainage Pattern in the Yucca Mountain, Nevada Region During Late Miocene Volcanism, Scott C. Lundstrom and Richard G. Warren, (High Level Radio-active Waste Management, High Level Radioactive Waste Proper Compiler (2014) 2021 (2021) Waste Program Committee, 1994), p2121-2130.

Methods and Economics of Drainage Reduction Through Improved Irrigation, Blaine R. Hanson and Allan E. Ful-

ton, IR Mar./Apr. 94, p308-321.

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Non-steady-Flow Type Curves for Strip Aquifers with Constant Drawdown, Halil Onder, IR July/Aug. 94, p732-741.

Postcyclic Undrained Strength for Cohesive Soils, Kazuya Yasuhara, GT Nov. 94, p1961-1979.

rasunara, G1 Nov. 94, p1901-119/9.
Probabilistic Design of Open Drainage Channels, Said M. Easa, IR Nov./Dec. 92, p868-881.
Reliability Analysis of Open Drainage Channels under Multiple Failure Modes, Said M. Easa, IR Nov./Dec. 94, p1007-1024.

Role of Urban Storm-Flow Volume in Local Drainage Problems, Bruce K. Ferguson and Tamas Deak, WR July/Aug. 94, p523-530.

Safety Grates in Supercritical Channels, Julia E. Allred-Coonrod, IR Jan./Feb. 94, p218-224.

Seepage from Canal to Asymmetric Drainages, Abate T. Wolde-Kirkos and A. S. Chawla, IR Sept./Oct. 94, p949-956.

Spatial Distribution of Potential Near Surface Moisture Flux at Yucca Mountain, Alan L. Flint and Lorraine E. Flint, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2352-2358.

Survey of Stormwater Detention State of Practice, Ben R. Urbonas, Jay Carlson and L. Scott Tucker, (Water Policy

and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p873-876. Unsteady Drainage with Variable Drainage Porosity, Rajendra K. Gupta, Ashim K. Bhattacharya and Pitam

Chandra, IR July/Aug. 94, p703-715.

Wetland Loss Rates and Agricultural Drainage, Aaron J. Douglas, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p545-548.

Drainage basins

Algorithm for Precise Drainage-Basin Delineation, E. James Nelson, Norman L. Jones and A. Woodruff Miller,

HY Mar. 94, p298-312.

Recreating a Process: The West Georgia Regional Water Supply Plan, Ken Hall, David Vaughn and Jim Cooley, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p493-496.

Drainage structures

Comparison of Results from Alluvial Fan Design Methodology with Historic Data, Syndi J. Flippin and Richard H. French, IR Jan./Feb. 94, p195-210.

Harry Seed, Liquefaction & the Gravel Drain, Choule J. Sonu, Hiroshi Oishi and Katsuhiko Ito, CE Dec. 93,

p58-60.

Identification of Problems, Solutions, and Cost Savings for Maintenance of Drainageways, Mark R. Hunter, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p194-208.

Drainage systems

Discharge-Frequency Relationships in Distributary Flow Systems, Edward R. Mifflin, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1085-1089.

Evaluation of Drainable Base Courses for Pavements, William P. Grogan, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p693-

Hydraulic Pipe Reshaper, ET Aug./Sept. 94, p10.

197

Investigation of Dry-Weather Pollutant Entries Into Storm-Drainage Systems, Richard Field, Robert Pitt, Melinda Lalor, Michael Brown, William Vilkelis and Edward Phackston, EE Sept./Oct. 94, p1044-1066.

Maintenance Management Systems for Urban Drainage, Neil S. Grigg, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p2-10.

Sewerage Failure, Diagnosis and Rehabilitation, J. W. Delleur, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p11-28.

A Stochastic Framework for the Modeling of Failures in Urban Drainage Systems due to Microscale Effects, P. La Barbera, L. Lanza and U. Parodi, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p197-208.

Urban Drainage Rehabilitation Programs and Techniques. Edited by William A. Macaitis, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994, 0-7844-0038-5, 223pp.

Drain-Spacing Calculation Considering Influence of Evap oration, Wang Wenyan, Shen Bing and Li Zhilu, IR May/June 94, p563-572.

Hydraulic Model Studies of Recessed Curb Inlets and Bridge Drains, E. R. Holley, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p528-532

Mathematical Modeling of Saturated-Unsaturated Flow to Drains, Saleem Ahmad, Deepak Kashyap and B. S. Mathur, IR Jan./Feb. 93, p18-33.

Modeling Regional Flow and Flow to Drains, G. M. Pohll and J. C. Guitjens, IR Sept./Oct. 94, p925-939.

Strip Drains in Dredged Material Placement Areas, Timo-thy D. Stark and Jack Fowler, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p420-429.

An Attempt of an Aquifer Model with Lack of Data, Octavio Cabezut-Boo, Ricardo Anza and Luis Tubilla, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p312-316.

Drawdowns for Leaky-Aquifer Flow with Storage in Fi-nite-Width Sink, Louis H. Motz, IR July/Aug. 94, p820-

Non-steady-Flow Type Curves for Strip Aquifers with Constant Drawdown, Halil Onder, 1R July/Aug. 94, p732-741.

Selective Withdrawal Using Circular, Partly Submerged Intake Structures, James J. Sharp and T. M. Parchure, HY May 93, p615-627.

Transient Radius of Influence Model, Shu Tung Chu, IR Sept./Oct. 94, p964-969.

CADD Utilities for the Structural Designer, Ranjit A. Sahair, CC Mar. 94, p1,2-5.

Object Maps for Developing Automated Working Drawing Quality Control Procedures, M. Kevin Parfitt, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1787-1790.

Dredge spoil

Analysis of Dredged Material Placed in Open Water, B. H. Johnson, N. W. Scheffner, A. M. Teeter, E. B. Hands and H. R. Moritz, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p18-27.

Application of Studies on the Overboard Placement of Dredged Sediments to the Management of Disposal Sites, William Panageotou and Jeffrey Halka, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p349-358.

Assessing the Fate of Dredged Sediments Placed in Open-Water Sites, Northern Chesapeake Bay, Jeffrey Halka, William Panageotou, Lawrence Sanford and Shenn Yu-Chou, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1162-1171.

Beneficial Uses of Dredged Material on the Upper Great Lakes, Douglas J. Zande and M. Pamela Horner, (Dredg-

Lakes, Douglas J. Zahue and wi. Falmeta Fromer, Oreag-ing '94, E. Clark McNair, Jr., ed., 1994), p654-663. Beneficial uses of dredged material principles and practice, T. Neville Burt and Michael P. Dearnaley, (*Dredging* '94, E. Clark McNair, Jr., ed., 1994), p631-643. Beneficial Uses of Dredged Material: Part of the Solution

to Restoration of Louisiana's Coastal Wetlands, Linda Glenboski Mathies, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p626-630.

Biological and Physical Characterization of a Deep-Ocean Disposal Site off Northern California, James A. Blake, Catherine A. Courtney, Barbara Hecker, Brigitte Hilbig, Jo Ann Muramoto and Donald C. Rhoads, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p111-120.

Capping Contaminated Sediments - The Theoretical Basis and Laboratory Experimental Evidence for Chemical Containment, L. J. Thibodeaux, K. T. Valsaraj and D. D. Reible, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1001-1007.

Chemical Flux of Pore Water Through Sediment Caps, Peggy Murray, Drew Carey and Thomas J. Fredette, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1008-1016

Coal Ash and Dredged Material in Reef Construction, William B. Baker, Jr. and Richard F. Gorini, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p664-672.

Constructing Beneficial Use Dredged Material Projects, Robert M. Parry, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p547-554.

Construction of Intertidal Mudflats as a Beneficial Use of Dredged Material, G. L. Ray, D. G. Clarke, T. P. Wilber and T. J. Fredette, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p946-955.

Contaminated Dredged Sediment Disposal Criteria, G. Fred Lee and Anne Jones-Lee, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p121-130.

Coordinating the Feasibility of a Dredged Material Separation System Using Hydrocyclones for the Maintenance Dredging Operation at Canaveral Harbor, Florida, Deborah R. Heibel, Mitch A. Granat and Mark Wolff, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p38-47

Design of Dredge Containment and Dewatering Facilities, John M. Logigian, Edward A. Dudek, Jr. and Michael R. Palermo, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1230-1239.

Design/Construction of a CFD Over Dredged Sludge, Jeffrey D. Horsfall and Katherine E. Martin, (Dredging 94, E. Clark McNair, Jr., ed., 1994), p1250-1259.

Developing Design Parameters for Constructing Ecologically Functional Marshes Using Dredged Material in Galveston Bay, Texas, Lawrence P. Rozas and Roger J. Zimmerman, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p810-822.

Development of a Long-Term Dredged Material Management Plan Chincoteague, Virginia, Tom B. Langley, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p359-

Developments in Dredges during the last decade, Ruud Ouwerkerk and Hans Greve, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p690-700.

Dewatering and Crust Management of Confined Disposal Areas in Galveston Bay, Texas, Richard F. Thomas, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1400-1405.

Dioxin Capping Management and Monitoring Program: Design and Implementation, Brian May, Douglas Pabst and Scott McDowell, (*Dredging '94*, E. Clark McNair, 1994) 1997, 19 Jr., ed., 1994), p1027-1036.

Dioxin Contamination in Sediments of the Port of New York and New Jersey: The Search for Criteria, John F. Tavolaro and Joseph Olha, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p150-159.

Disposal of Contaminated Sediments in NY/NJ Harbor, Joel A. Pecchioli, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p606-615.

Do We Need More Waterbird Nesting Islands in Galveston Bay, Texas? (and if so, how and where do we build them?), Phil Glass, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p796-809.

C. 1994, p. 1994, p. 1988.
Steel, Marcial Accumulation at a Dispersive Disposal Site, Mary Baker Wiley, Drew Carey, Thomas J. Fredette and W. F. Bohlen, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1172-1181.

Dredged Material Dispersion and Accumulation at a Deep Ocean Disposal Site: Comparison of Monitoring Study Results and Model Predictions, Catherine A. Courtney, Albert Mills Soldate, Jr., Jeff Cox and James A. Blake, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p96-102

Dredged Material Dispersion from the Vicinity of a Pipeline Discharge, Tylers Beach, Virginia, Allen Teeter, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p918-

Dredged Material Disposal and Migratory Birds, Les E. Weigum, (Dredging '94, E. Clark McNair, Jr., ed.,

1994), p1380-1387. Dredged Material Used in Sand-filled Containers for Scour and Erosion Control, Lee E. Harris, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p537-546.

DREDGMAP: A PC Based System to Predict the Fate of Dredged Material, J. Craig Swanson, Malcolm L. Spaulding and Tatsusaburo Isaji, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p200-209.

Clark McNair, Jr. ed., 1994), p200-209.

Eagle Harbor Superfund Project, Eric E. Nelson, Amy L. Venderheiden and A. David Schuldt, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1122-1131.

Effects from Thin-Layer Disposal of Dredged Material on Water Quality in Mississippi Sound, Susan Ivester Rees and Pace Wilber, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1481-1489.

Empirical Guidance for Siting Berms to Promote Stability or Nourishment Benefits, Edward B. Hands and Donald T. Resio, (Dredging '94, E. Clark McNair, Jr., ed.,

1994), p220-228.

Enhancing Habitat at an Onshore Dredge Disposal Site, Gary W. Oates, William J. Silva and Gregory P. Mailho, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1461-

Environmental Restoration and Enhancement using Dredged Material in Chesapeake Bay, Maryland, S. D. Garbarino, R. N. Blama, M. C. Landin, S. R. Maynord and T. R. Patin, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p384-393.

Evaluating Methods for Statistical Analysis of Less than Detection Limit Data Using Simulated Small Samples 2. General Results, Joan U. Clarke, (*Dredging '94*, E. Clark

McNair, Jr., ed., 1994), p747-755.

Evaluation of Remedial Options for the Sitcum Waterway Sediments: A Case Study, John R. Verduin, III, Garry E. Horvitz and Richard C. Gilmur, (Dredging '94, E. Clark

McNair, Jr., ed., 1994), p555-566. Evolution of Beneficial Uses of Dredged Materials for Over 200 Million Cubic Yards of Dredged Material in Galveston Bay, Texas Part II - Framework & Approach, Mike Jansky, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p843-846.

Factors Affecting Degradation of Clay Masses, Paul A. Gilbert, (Dredging '94, E. Clark McNair, Jr., ed., 1994),

The Generation and Use of Site Specific Wave and Current Databases for Dredged Material Fate Predictions, Norman W. Scheffner, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p190-199.

Geotechnical Analysis of Capped Dredged Material Mounds, Armand J. Silva, Horst G. Brandes, Carl J. Uchytil, Thomas J. Fredette and Drew Carey, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p410-419.

Groundwater Model Simulation of Chemical Transport from a Nearshore Confined Sediment Disposal Facility, Michael Riley, Gopal Biswas, Charles Boatman, Robert Brockhaus, Mark Utting and Doug Hotchkiss, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1517-1526.

Guidance for Wetland Restoration with Dredged Material, Michael R. Palermo and Elba A. Dardeau, Jr., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p956-960.

Habitat Considerations: Galveston Bay Demonstration Marsh, Andrew V. Sipocz, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p823-827.

Habitat Restoration Using Dredged Material: The Sonoma Baylands Wetland Demonstration Project, Scott P. Miner, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p928-937.

Habitat Value of Offshore Dredged Material Berms for Fishery Resources, Douglas Clarke and Richard Kasul, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p938-

History of Entrance Channel Dredging and Disposal Operations: St. Marys, Georgia/Florida, Joan Pope, J. Bailey Smith and Laurel T. Gorman, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p906-917.

Integrated Acoustic Seafloor Characterization, Peggy Murray, Ed DeAngelo, Jeff Parker and Thomas J. Fredette, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p295-

303

LADS System, Inc. Thermal Remediation Treatment for Contaminated Sediment, Vladimir Shepsis, Nancy L. Case and Gregory L. Hartman, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p66-75.

Leachate Testing and Evaluation for Freshwater Sediments, James M. Brannon and Tommy E. Myers, (*Dredging* '94, E. Clark McNair, Jr., ed., 1994), p737-746.

Management of Dredged Material Disposal for San Francisco Bay Projects, Thomas H. Wakeman and Jacob Harari, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p484-489.

The Management of Dredged Material Placement for the Development of Oyster Rock on the Eastern Shore of Virginia, Walter I. Priest, III, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p394-398.

Management of San Diego Bay Dredged Material Dispos-al, Dan Muslin, (*Dredging '94*, E. Clark McNair, Jr., ed.,

1994), p332-341.

Marathon Battery Superfund Project - A Review of Design, Construction and Lessons Learned, Michael P. Taylor, Pamela N. Tames and Alan R. Elia, (*Dredging* 94, E. Clark McNair, Jr., ed., 1994), p1210-1219.

Modeling Cap Placement at New York Mud Dump Site, Robert E. Randall, James E. Clausner and Billy H. Johnson, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1295-1304

Nearshore Confined Disposal in a Tidally-Influenced Envi-ronment—Design and Operation Experience in Puget Sound, Douglas A. Hotchkiss and Charles D. Boatman, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1260-

New Applications and Practices for Beneficial Uses of Dredged Material, M. C. Landin, J. Fowler and H. H. Allen, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p526-536.

New Techniques for Experimental Studies for Dredged Material Dispersion, Philip J. W. Roberts, Adrian Ferrier and B. H. Johnson, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1192-1200.

Numerical Modeling of Salt Transport at a Solid Waste Disposal Site Capped With Coastal Dredged Material, Ram Krishnamohan, John B. Herbich and Fred S. Williams, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1152-1161.

Ocean Disposal with Capping of Dioxin Contaminated Sediment: New York Case History #1, Monte Greges, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1278-

Performance of Nearshore Berm Disposal at Port Canaveral, Florida, Kevin R. Bodge, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1182-1191.

Phased and Layered Sampling for Navy Dredging, Sherry L. Ashbaugh, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1436-1440.

Pink Sandverbena Recovery Efforts, Eric P. Braun and Thomas Kaye, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1441-1450.

Placement Techniques for Capping Contaminated Sediments, Michael R. Palermo, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1111-1121.

Plans, Design, and Construction of a 100-Hectare Intertidal Demonstration Marsh Using Large-Scale Cutter Head Dredging Equipment in Galveston Bay, Texas, Keith P. Kindle, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p833-842

Planting of Large-Scale Marsh Projects, Eddie Seidensticker, (Dredging '94, E. Clark McNair, Jr., ed., 1994),

p828-832

Poplar Island Reclamation and Beneficial Uses of Dredged Material, Edward T. Fulford, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1406-1415.

Port Authority's Role in Inlet Management and Beneficial Use of Dredged Material, Malcolm E. McLouth, Joseph Lapolla and Kevin Bodge, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p971-980.

Nicyan, J., ed., 1994), pp 11-960.
Port of Tacoma Milwaukee Waterway Nearshore Fill Design, John R. Verduin, Doug Saathoff and Garry E. Horvitz, (Dredging '94, E. Clark McNair, Jr., ed., 1994),

p1388-1399.

Pot-Nets, Delaware, Wetland Habitat and Beneficial Uses of Dredged Material Project, Edward T. Fulford and Robert E. Tunnell, Jr., (Dredging '94, E. Clark McNair,

Jr., ed., 1994), p1451-1460.

A Predictive Hydrologic Model for Contaminant Leaching and Liner Effectiveness at Dredged Material Confined Disposal Facilities, Nadim M. Aziz, Paul R. Schroeder and Tommy E. Myers, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1507-1516.

Preliminary Screening Studies for Dredge Disposal Op-tions, Howard L. Cumberland, Barry J. Snyder and Wil-liam C. Lester, (*Dredging '94*, E. Clark McNair, Jr., ed.,

1994), p342-348.

Progress in England and Wales on the Development of Beneficial Uses of Dredged Material, L. A. Murray, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p644-653.

Puckette, Paul, Michael Tubman and Blair Brumley, (Dredging '94, E. Clark McNair, Ir., ed., 1994), p86-95. Quality Assurance and Quality Control in Laboratory Bioassays of Dredged Material, David W. Moore, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p728-

736.

Research on the Consolidation of Mud, Erik Toorman and Marc Sas, (Dredging '94, E. Clark McNair, Jr., ed.,

1994), p430-439. Restoring and Protecting Marine Habitat, Thomas A. Sands and Wayne Young, (Dredging '94, E. Clark McNair, Jr.,

ed., 1994), p368-377

Sediment Dispersion and Footprint Modeling Initial Characterization at a Deep Disposal Site, Albert Mills Soldate, Jr. and Kim A. Brown, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p103-110.

Sediment Remediation: An International Review, Daniel E. Averett and Norman R. Francingues, Jr., (Dredging '94,

Averett and norman R. Francingues, Ir., (Dreaging '94, E. Clark McNair, Jr., ed., 1994), p596-605.

Seepage through Dike Walls of the Chicago Confined Disposal Facility, D. D. Reible, S. A. Savant-Malhiet, L. J. Thibodeaux, K. T. Valsaraj and T. E. Myers, (Dreaging '94, E. Clark McNair, Tr., ed., 1994), p1490-1496.

Site Selection for Beneficial Uses Of Dreaged Material in

Galveston Bay, Texas, USA, Russell Swafford and Richard F. Gorini, (*Dredging '94*, E. Clark McNair, Jr.,

ed., 1994), p399-409.

State Regulation of Upland Disposal of Dredged Material in Michigan, Frank Snitz, Douglas Zande and Pamela Horner, (Dredging '94, E. Clark McNair, Jr., ed., 1994),

Strip Drains in Dredged Material Placement Areas, Timo-thy D. Stark and Jack Fowler, (Dredging '94, E. Clark

McNair, Jr., ed., 1994), p420-429.

Subbottom Profiling of a Sand Capped Disposal Mound, Peggy Murray, Mary Wiley, Douglas Pabst and Brian May, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1285-1294

TBP Revisited: A Ten Year Perspective on a Screening Test for Dredged Sediment Bioaccumulation Potential, Victor A. McFarland and Paul W. Ferguson, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p718-727

Technical Area 5 - Dredging Research Program, Thomas W. Richardson, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1-10.

Technical Guidelines for Dredged Material, Norman R. Francingues, Jr. and Michael R. Palermo, (Dredging '94,

F. Clark McNair, Jr., ed., 1994), p616-625.

E. Clark McNair, Jr., ed., 1994), p616-625.

Verification of Numerical Modeling of the Fate of Disposed Dredged Material, Michelle M. Thevenot and Billy H. Johnson, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p180-189.

Wave Attenuation at the Mobile Stable Berm, Gregory L. Williams and Cheryl Burke Pollock, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p339-351.

Comparing Dredging Costs Across Projects, Gerald E. Greener and Greg Hartman, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1325-1334.

Demonstration of Pneuma Dredging Technology, Giovanni Faldi and Timothy L. Gahring, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1047-1049. Evolution of Cable Arm Clamshell Bucket, J.-P. Pelletier,

R. Santiago and J. Lajeunesse, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1050-1060.

Monitoring Performance Indicators on Leased Hydraulic Cutterhead Dredges, William R. Chapman, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1315-1324.

The Welland River Dredging Demonstration, Philip Miles and Donald Marr, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1061-1070.

Dredging

Acoustic Impedance for Assessing Subbottom Conditions, Robert F. Ballard, Jr. and Richard G. McGee, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p249-258.

Agitation Dredging Environmental Study, Larry M. Stuber and Elizabeth A. Day, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p76-85.

Application of Dredge Monitoring Systems to Dredge Contract Administration Quality Assurance, Stephen H. Scott and Jeffrey D. Jorgeson, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p776-785.

Application of Studies on the Overboard Placement of Dredged Sediments to the Management of Disposal Sites, William Panageotou and Jeffrey Halka, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p349-358

Applying Dredged Material to Recreation Area Development, Russell K. Tillman and Thomas R. Patin, (Marinas, Parks and Recreation Developments, Marshall Flug,

nas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p271-282.

Assessing Effects for Disposal Sites off San Francisco, Peter Hamilton and Allan Y. Ota, (Estuarine and Coast-all Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Costic Stuceson ed. 1900, p.14.28

Craig Swanson, ed., 1994), p14-28.
Banks, Glynn E. Michael P. Alexander and Allen Teeter, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p304-

Calibration of Movable Bed Model for Armant Area, F. S. El-Gamal and A. F. Ahmed, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p119-128.

Cleanup of a Coal Tar Deposit Using a Vacuum Clam, B. G. Bennett, I. K. Hill and A. Z. Erzinclioglu, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p991-1000.

Collecting Sediment Environmental and Geotechnical Data Using an Impact Core Sampler, James M. Schmidt, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p279-

Comparing Dredging Costs Across Projects, Gerald E. Greener and Greg Hartman, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1325-1334.

Comparison of Two Eductors for Sand Bypassing, Gregory Williams and James E. Clausner, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p875-884.

Demonstration of Equipment for Dredging Contaminated Sediments at Buffalo River, Buffalo, New York, B. Thomas Kenna, Daniel E. Averett, Paul A. Zappi and Stephen M. Yaksich, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p885-895.

Demonstration of Pneuma Dredging Technology, Giovanni Faldi and Timothy L. Gahring, (Dredging '94, E. Clark Faldi and Timothy L. Gahring, (*Dredging* McNair, Jr., ed., 1994), p1047-1049.

Development of a Long-Term Dredged Material Management Plan Chincoteague, Virginia, Tom B. Langley, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p359-

Development of a Technique to Acoustically Detect and Study Fluid Mud and its use in Dredging Management, Shawn Hanrahan and Anthony DePasquale, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p440-448.

Developments in Dredges during the last decade, Ruud Ouwerkerk and Hans Greve, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p690-700. Dredging '94, 2 Vols., E. Clark McNair, Jr., ed., 1994, 0-7844-0010-5, 1580pp.

Dredging Desk Reference: Accomplishments and Future Developments, Thomas M. Verna and Lyle J. Ma-ciejewski, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p170-179.

Dredging Equipment, Methods and Contracts, Gregory E. Breerwood, (Dredging '94, E. Clark McNair, Jr., ed.,

1994), p509-515.

Dredging Impacts on Delaware Estuary Tides, Joseph L. Dredging Impacts on Delaware Estuary Tides, Joseph L. DiLorenzo, Poshu Huang, M. Llewellyn Thatcher and Tavit O. Najarian, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p86-104.
Dredging in 3D – Delays, Damages and Disputes, Frank McDonough, Patrick A. McGeehin and Steven Kmieciak, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p130-1314.

1994), p1305-1314.

Dredging in the Bering Sea St. George Island 1993-94 Harbor Dredging Project, William J. Gerken and Jeffrey F. Gilman, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1426-1435

Dredging of Fishing Harbour, Walvis Bay, Keith Mackie, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1037-

Dredging Research Program Economic Benefits Study, Fletcher H. Griffis, Sotiris Pagdadis, Charles E. Jettmar and Russell K. Tillman, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1335-1354.

The Dredging Research Program Technical Area 2 Materi-al Properties Related to Navigation and Dredging, Don Banks, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1554-1561.

The Dredging Research Program Technical Area 3, William D. Martin, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p11-17

Environmental Mediation and Open-Water Disposal, Joseph D. Germano, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p160-169.

Environmental Monitoring and Mitigation: Harbor Tunnel Dredging and Disposal Operations, Boston, Massachusetts, Curtis A. Meininger and Alan D. Randall, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1471-1480.

Estimating Sediment Relative Density Using an Impact Core Sampler and Wave Equation-based Pile Analysis, James M. Schmidt and Donald E. Bruggers, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1212-1219

Evaluation of Remedial Options for the Sitcum Waterway Sediments: A Case Study, John R. Verduin, III, Garry E. Horvitz and Richard C. Gilmur, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p555-566. Evolution of Cable Arm Clamshell Bucket, J-P. Pelletier,

R. Santiago and J. Lajeunesse, (Dredging '94, E. Clark

McNair, Jr., ed., 1994), p1050-1060.

Five Year Implementation Retrospective on the Puget Sound Dredged Disposal Analysis Program (PSDDA), Sound Dredged Disposal Analysis Program (PSIJDA),
 David Kendall, David Fox, Stephanie Stirling, Maria
 Peeler, Gene Revelas, Phillip Hertzog, Justine Barton
 and John Malek, (Dredging '94, E. Clark McNair, Jr.,
 ed., 1994), p1527-1553.
 The Fleets of San Francisco Crippled by Phony Science
 William Deland L. (Mariner, Park and Progration De.

Wm. P. Boland, Jr., (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik,

ed., 1994, p162-169.
Flocculation Techniques Used for Dredging Operations, Ronald H. Church, Carl W. Smith and Bernard J. Scheiner, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1497-1506.

Harborside International Golf and Marina Facility, Frank L. Kudrna, Jr. and Richard P. Nugent, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p124-131.

History of Entrance Channel Dredging and Disposal Operations: St. Marys, Georgia/Florida, Joan Pope, J. Bailey Smith and Laurel T. Gorman, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p906-917.

Innovative Design of a Multiport Diffuser, Mindy L. Roberts and Bernadette H. Kolb, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p56-65.

Integrated Environmental Monitoring Dredging Projects in the Netherlands, Thomas Arts and Andre Kok, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1370-1379.

Knowledge-Based Expert Systems For Geotechnical Factors in Dredging, S. Joseph Spigolon, Reda M. Bakeer and Jack Fowler, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p269-278.

Maintenance Dredging in the River Scheldt, an Environmental Approach, J. Smits, L. Meyvis and F. Wens, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p499-

The Management of Dredged Material Placement for the Development of Oyster Rock on the Eastern Shore of Virginia, Walter I. Priest, III, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p394-398.

Management of Dredged Material Placement Operations, Timothy D. Stark, Iván Contreras and Jack Fowler, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1353-1365.

A Method for Rock Dredging Performance Forecasting, Jorge E. Abramian and R. Bruce Taylor, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p229-238.

Monitoring of a dredging operation using innovative sedi-ment tracing techniques, Jonathan Marsh, (Dredging 94, E. Clark McNair, Jr., ed., 1994), p1360-1369

Monitoring of Water Injection Dredging, Dredging Pollut-ed Sediment, W. G. Borst, Joh. G. S. Pennekamp, H. Goossens, A. Mullié, P. Verpalen, T. Arts, P. F. van Dreumel and W. D. Rokosch, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p896-905.

The National Spatial Data Infrastructure and its Usefulness to the Dredging Community, Milington Lockwood, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p516-

The Navigation Data Center and Its Role in Dredging Management, Virginia R. Pankow, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p490-498.

New Approaches for Determination of Rock and Rock Mass Properties at Dredging Sites, Hardy J. Smith, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p259-268.

New Bedford Harbor, Massachusetts Dredging/Disposal of PCB Contaminated Sediments, Mark J. Otis, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p579-587.

On the Snow-Plough Effect when Cutting Water Saturated Sand with Inclined Straight Blades, S. A. Miedema, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p865-

One Mans View of Dredging Equipment 2020, Gerald E. Greener, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p683-689

Plans, Design, and Construction of a 100-Hectare Intertidal Demonstration Marsh Using Large-Scale Cutter Head Dredging Equipment in Galveston Bay, Texas, Keith P. Kindle, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p833-842.

Preparation of Bid Documents for Dredging/Excavating Contaminated Sediments, Soils and Marsh Deposits at the Marathon Battery Superfund Site Cold Spring, NY, Thomas M. Simmons, Gregory P. Matthews and Nick Multari, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1201-1209.

Reservoir Sediment Removal: Hydrosuction Dredging, Rollin H. Hotchkiss and Xi Huang, (Hydraulic Engi-neering '94, George V. Cottoneo, ed. and Ralph R. Ru-mer, ed., 1994), p1020-1024.

Risk-Based Budgeting for Maintenance Dredging, Michael R. Walsh and David A. Moser, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p234-242

SCREENER - An Expert System tool for Environmental Impacts Evaluation and Mitigation, P. Nathan Daniel, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1355-

1359

A Sea Turtle Deflecting Hopper Dredge Draghead, Michael P. Alexander and Glynn E. Banks, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p857-864.

Sediment Remediation: An International Review, Daniel E. Averett and Norman R. Francingues, Jr., (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p596-605.

Silent Inspector - An Aid to Dredge Inspection, James Rosati, III and Timothy L. Welp, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p756-763.

Site Investigation Surveys for Dredging Projects, S. J. Plasman and J. Peuchen, (*Dredging '94*, E. Clark McNair,

Jr., ed., 1994), p322-331.

The Stump - A New Dimension in Dredging, George W. Batchelder, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p701-707.

Tonnes Dry Solids Reviewed, Robert C. Rullens, Kees d'Angremond and Gerard Ottevanger, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p673-682.

Turbidity and Contaminant Release During Dredging of Contaminated Sediments, Ronald W. van Oostrum and Peter Vroege, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p210-219

Uncertainty Analysis of Dredge Production with Correlation, Said M. Easa, WW Sept./Oct. 94, p499-507.

Uncertainty Analysis of Dredge-Production Measurement and Calculation, Stephen H. Scott, WW Mar./Apr. 93, p193-203.

Underwater Cleanup of a Pool of Liquid Creosote, B. G. Bennett and I. K. Hill, (*Dredging '94*, E. Clark McNair,

Bennett and I. K. IIII, 1993, 1996. 1970. Unexploded Ordnance (UXO) and Dredging, Timothy Welp, James Clausner, Raymond Pilon, Joan Pope and Richard Lewis, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p48-55.

An Update on Dredge Instrumentation and Automation, Arie Korevaar, (Dredging '94, E. Clark McNair, Jr., ed.,

1994), p764-775.

Vessel Positioning, Survey Controls and Dredge Monitor-ing Systems, George P. Bonner, Cary B. Cox, Barry W. McCleave and Monroe B. Savage, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p28-37.

Wando Terminal Ground Improvement Program, James Drew Hussin and Forrest Foshee, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1416-1425.

Water Injection Dredging in the United States, David Knox, Daniel J. Krumholz and James E. Clausner, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p847-856

Water Injection Takes the Bucket Out of Dredging, CE Oct. 94, p21-22,24.

The Welland River Dredging Demonstration, Philip Miles and Donald Marr, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1061-1070.

Wind Lake Improvement Plan Dredging Project Wind Lake, Wisconsin, Robert W. Carr and Kathy Aron, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p141-144.

Drift

Behavior of Tall Frame Combining Rigid and Semi-Rigid Connections, Norimitsu Kishi, Wai-Fah Chen, Yoshiaki Goto and Ken-ichi G. Matsuoka, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1185-1190

Deflection Amplification Factor for Seismic Design Provisions, Chia-Ming Uang and Ahmed Maarouf, ST Aug. 94, p2423-2436.

Lateral Load Resisting Systems for Circular Buildings, Robert J. McNamara and Brent R. Goldstein, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p636-641.

Drilled shafts

Cyclic Axial Loading of Drilled Shafts in Cohesive Soil, Kevin J. McManus and Fred H. Kulhawy, GT Sept. 94,

Design of Socketed Drilled Shafts in Limestone, M. C. McVay, F. C. Townsend and R. C. Williams, GT Oct. 92, p1626-1637.

Effects of Cyclic Lateral Loads on Piles in Sand, J. H. Long and Gheert Vanneste, GT Jan. 94, p225-244.

Lateral Load Analysis of Groups of Piles and Drilled Shafts, Phillip S. K. Ooi and J. Michael Duncan, GT June 94, p1034-1050.

Lateral Load Analysis of Single Piles and Drilled Shafts, J. Michael Duncan, Leonard T. Evans, Jr. and Phillip S. K. Ooi, GT June 94, p1018-1033.

Nonlinear Undrained Lateral Response of Rigid Drilled Shafts Using Continuum Theory, Paul W. Mayne, Fred H. Kulhawy and Charles H. Trautmann, (Vertical and Horizontal Deformations of Foundations and Embank-ments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p663-676.

Perimeter Load Transfer in Model Drilled Shafts Formed under Slurry, R. E. Majano, M. W. O'Neill and K. M. Hassan, GT Dec. 94, p2136-2154.

Testing and Predicting the Movement of a Drilled Shaft in New Mexico, Koon Meng Chua, Wimpie A.N. Aspar and Robert Meyers, (Vertical and Horizontal Deforma-tions of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p279-290.

The Tip Displacement of Drilled Shafts in Sands, V. N. Ghionna, M. Jamiolkowski, S. Pedroni and R. Salgado, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1039-1057.

Uplift Capacity of Small-Diameter Drilled Shafts from In Situ Tests, Alan J. Lutenegger and Gerald A. Miller, GT Aug. 94, p1362-1380.

Drilled-in caissons

The Challenge of Housing the Largest Detector, Prabir Das, C. J. Roth and Nachum Secker, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p755-760.

Analyses of Releases Due to Drilling at the Potential Yucca Mountain Repository, R. W. Barnard, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1292-1297.

Developing Standardized Connection Analysis Techniques for Slim Hole Core Rod Designs, Gregory Fehr and Edmond I. Bailey, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1048-1054.

The Impact of the Doe Decision Making Process at the Waste Isolation Pilot Plant with Respect to Petroleum Reserves, Matthew Silva, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p1753-1761.

Integrated Geology and Preliminary Cross Section Along the North Ramp of the Exploratory Studies Facility, Yucca Mountain, D. C. Buesch, R. P. Dickerson, R. M. Drake and R. W. Spengler, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1055-1065.

Mechanical and Bulk Properties in Support of ESF Design Issues, R. H. Price, R. J. Martin, III, P. J. Boyd and J. S. Noel, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p1987-1992.

New Approaches for Determination of Rock and Rock Mass Properties at Dredging Sites, Hardy J. Smith, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p259-

Oil and Gas Exploration Near Yucca Mountain, Southern Nevada, John A. Grow, Charles E. Barker and Anita G. Harris, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1298-1315.

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Drip irrigation

Pretreatment of Secondary Effluent for Drip Irrigation, Massoud A. Tajrishy, David J. Hills and George Tchobanoglous, IR July/Aug. 94, p716-731.

Driven niles

Settlement Prediction for Driven Piles and Pile Groups, Harry G. Poulos, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1629-1649.

Vibration Induced Settlement From Blast Densification and Pile Driving, Charles H. Dowding, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1672-1688.

Driver behavior

Effect of Restriction of Vision on Driving Performance, Rod Troutbeck and Joanne M. Wood, TE Sept./Oct. 94, p737-752.

Evaluating ATIS Impacts on Air Quality, H. Al-Deek, R. Wayson and A. E. Radwan, (*Transportation Planning and Air Quality II*, Thomas F. Wholly, ed., 1994), p95-117.

Human Factors Design Considerations for Variable Message Freeway Signs, Jeffrey Dale Armstrong and Jonathan E. Upchurch, TE Mar./Apr. 94, p264-282.

Human Factors Engineering Applications in the Testing of the Legal Weight Truck Cask Transportation System, Thomas C. Smith, Millard Peck, III and Robert A. Sealock, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p375-380.

Studying Route Choice Behavior Using Computer-Aided Telephone Interviews and GIS, Mohamed A. Abdel-Aty, Ryuichi Kitamura, Paul P. Jovanis, Prasuna Reddy and Kenneth M. Vaughn, (Computing in Civil Engineering, Khalii Khozeimeh, ed., 1994), pl 343-1348.

Using Interactive Simulation to Explore Drivers' Response to Visual Information Systems, Jeffrey L. Adler, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1735-1742.

Driver test

Effect of Restriction of Vision on Driving Performance, Rod Troutbeck and Joanne M. Wood, TE Sept./Oct. 94, p737-752.

Voice Operated Information System (VOIS) for Electronic Pages Information System, Prasuna DVG Reddy, Ryuchi Kitamura and Paul P. Jovanis, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1524-1531.

Drop structures

Riprap Sizing for Modified ARS-Type Basin, Steven R. Abt, Glenn B. Hamilton, Chester C. Watson and John Smith, HY Feb. 94, p260-267.

Using Drop Structures for Stream Gaging, Bobby J. Brown, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p21-26.

Droughts

Alfalfa Irrigation During Drought, J. C. Guitjens, IR Nov./ Dec. 93, p1092-1098.

Development of an Expert System for Daily Drought Monitoring, T. J. Chang, H. Zheng and X. A. Kleopa, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p630-639.

Drought and Water-Supply Management: Roles and Responsibilities. Neil S. Grigg and Evan C. Vlachos, WR Sept./Oct. 93, p531-541.

Economic Impacts of Severe and Sustained Drought, Robert A. Young, James F. Booker and Ari M. Michelsen, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p624-627.

Exploring Management Alternatives with Interactive Simulation, David I. Leib and Thomas C. Stiles, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p210-213.

A Gaming Analysis of Drought-Coping Policy Options, James L. Henderson, William B. Lord and Russell L. Gum, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p620-623.

The Law of the Colorado River: Can It Cope With Severe Sustained Drought? Lawrence J. MacDonnell, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p628-631

Missouri River Master Manual Review and Update, Lawrence J. Cieslik and Roy F. McAllister, Jr., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p673-676.

Missouri River Recreation Economic Analysis, Ronald C. Roberts and R. Scott Jackson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p681-685.

Performance of Integrated Municipal Water System During Drought, Radwan A. Al-Mubarak Al-Weshah and Douglas T. Shaw, WR July/Aug. 94, p531-545.

Predicting Hydrologic Impacts of a Severe and Sustained Drought on the Colorado River Basin, Taiye B. Sangoyomi and Benjamin L. Harding, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p616-619.

Probabilistic Characterization of Droughts, G. V. Loganathan, S. Mostaghimi, V. K. Lohani and M. K. Tchaou, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p197-200.

Reservoir Operation by the Use of an Expert System, Tiao J. Chang and David Moore, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p97-104.

Susceptibility of Reservoirs to Drought Using Palmer Index, William K. Johnson and Roger W. Kohne, WR May/June 93, p367-387.

Using A Risk-Based Relative Position Analysis to Initiate Water Conservation Measures, Chris Basford and Ron Harris, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p810-813.

Water-Supply Operations during Drought: Continuous Hedging Rule, Jhih-Shyang Shih and Charles ReVelle, WR Sept./Oct. 94, p613-629.

Drydock

Simulation Modeling Drystack Marina Facilities, Jeffrey G. Shelden and Kerry Simpson, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p587-596.

Ductilit

Application of High-Performance Steel in New and Retrofit Structures, Robert J. Dexter, Le-Wu Lu and John W. Fisher, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p336-343.

Behavior of Reinforced High-Strength-Concrete Corbels, Yook-Kong Yong and P. Balaguru, ST Apr. 94, p1182-1201

Cyclical Behavior of Welded Steel Shear Studs, Kurt Michael McMullin and Abolhassan Astaneh-Asl, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1024-1029.

Design of Mat Foundation for Egg Shape Digesters, S. S. Ibrahim and M. R. Graves, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p13-18.

Ductility of Concrete-Filled Steel Box Columns under Cyclic Loading, Tsutomu Usami and Hanbin Ge, ST July 94, p2021-2040.

Effects of Confinement on Concrete Columns: Plasticity Approach, A. I. Karabinis and P. D. Kiousis, ST Sept. 94, p2747-2767.

Flange Local Buckling and Behavior of I-Sections, Iqbal S. Sohal and Liping Cai, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p213-222.

Flexural Strength of Profiled Beams, Deric J. Oehlers, Howard D. Wright and Matthew J. Burnet, ST Feb. 94, p378-393. FRP Research for Highway Applications in Florida, Rajan Sen and Mohsen Shahawy, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994),

High-Strength Concrete Columns Confined by Rectangular Ties, Daniel Cusson and Patrick Paultre, ST Mar. 94, p783-804.

High-Strength Concrete Columns in High-Rise Buildings, Murat Saatcioglu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p37-42

Lightweight Concrete for a Segmental Bridge, Juan A. Murillo, Steve Thoman and Dennis Smith, CE May 94,

- New Concept for Wrapping Columns with a High Strength Fiber/Epoxy System, Edward R. Fyfe, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1156-1162.
- Seismic Behavior of Plain- and Reinforced-Masonry Buildings, Miha Tomaževič and Polona Weiss, ST Feb. 94, p323-338.
- Seismic Performance of Steel-Encased Composite Columns, James M. Ricles and Shannon D. Paboojian, ST Aug. 94, p2474-2494.
- Seismic Retrofit of R/C Columns with Inadequate Lap Splices, R. S. Aboutaha, M. D. Engelhardt, J. O. Jirsa and M. E. Kreger, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1502-1507.

Seismic Shear Strength of Reinforced Concrete Columns, M. J. Nigel Priestley, Ravindra Verma and Yan Xiao, ST Aug. 94, p2310-2329.

Seismic-Resistant Special Truss-Moment Frames, Subhash C. Goel and Ahmad M. Itani, ST June 94, p1781-1797. Strength of FRC Corbels in Flexure, Nijad I. Fattuhi, ST

Feb. 94, p360-377.

Structural Reliability Analysis of Masonry Shear Walls, George T. Zorapapel, Gary C. Hart and Dan M. Frango-pol, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p205-210.

Variation of Ductility Capacity of Steel Beam-Columns, Masayoshi Nakashima, ST July 94, p1941-1960.

Welded Wire Fabric for Bridges. I: Ultimate Strength and Ductility, Bilal M. Ayyub, Peter C. Chang and Naji A. Al-Mutairi, ST June 94, p1866-1881.

Anomalous Measurements in a Compound Duct, David G. Rhodes and Donald W. Knight, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p311-320.

Distribution of Shear Force on Boundary of Smooth Rec-tangular Duct, David G. Rhodes and Donald W. Knight, HY July 94, p787-807.

Dune sands

The Aeolus Project: Measuring Coastal Wind and Sediment Systems, D. J. Sherman, B. O. Bauer, R. W. G. Carter, D. Jackson, J. McCloskey, R. G. D. Davidson-Arnott, P. A. Gares, N. L. Jackson and K. F. Nordstrom, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p476-487.

Dunes

Cartographic Characterization of the Littoral Camps of Dunes, Jesús Martínez Martínez, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p462-475.

Field and Prototype Measurements for Numerical Coastal Modelling, Hans-H. Dette, Jürgen Newe and Yongjun Wu, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p129-142

Floating Cover Influence on Sediment Transport in Dune-Bed Channels, Brennan T. Smith and Robert Ettema, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1156-1160.

Using the SedBed Monitor to Measure Bed Load, Roger A. Kuhnle and Robert W. Derrow, II, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p129-138.

Vertical Sorting Within Dune Structure, Mohamed Abdel-Motaleb, (Fundamentals and Advancements in Hydrau-lic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p139-148.

- Cement Plant CKD Recovery System, S. M. Cohen and M. E. Prokesch, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p612.
- Dust Levitation on the Moon, Frederick A. Slane, Nebojsa Duric and Jack O. Burns, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p897-906.
- Effects of Dust and Thermal Cycling on Telescope Mirror Performance, Koon Meng Chua, R. Eric Pease and Stewart W. Johnson, (Engineering, Construction, and Opera-tions in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p916-932.
- Engineering Implications of Levitating Lunar Dust, Frederick A. Slane, (Engineering, Construction, and Opera-tions in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1097-1105.
- The Levitation of Lunar Dust Via Electrostatic Forces, S. Doe, J. O. Burns, D. Pettit, J. Blacic and P. W. Keaton, Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p907-915.

Dve studies

Initial Dilution of Southeast Florida Ocean Outfalls, John R. Proni, Hening Huang and William P. Dammann, HY Dec. 94, p1409-1425.

- Continuous Treatment of Textile Water by Ozonation and Coagulation, Sheng H. Lin and Wen Y. Liu, EE Mar./ Apr. 94, p437-446.
- Effect of Acid Orange 7 on Nitrification Process, Yongjie He and Paul L. Bishop, EE Jan./Feb. 94, p108-121.

Dynamic analysis

- 3-D Dynamic Analysis of the Brent-Spence Through-Truss Bridge, I. E. Harik, D. L. Allen, R. L. Street, M. Guo, R. C. Graves, J. Harison and M. J. Gawry, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1112-1117.
- Analysis of Embedded Foundations by Substructure-Deletion Method, R. Betti and A. M. Abdel-Ghaffar, EM June 94, p1283-1303.
- Braced Double Skinned Structure in Lunar Application, Hamid R. Adib-Jahromi, Ramesh B. Malla and Michael A. Accorsi, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p47-56.
- Computer Applications in Structural Analysis and Design, J. A. Bohinsky and J. P. Lee, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p462-465.
- Cone Models for Embedded Foundation, Jethro W. Meek and John P. Wolf, GT Jan. 94, p60-80.
- Continuous Dynamic Model for Tapered Beam-Like Struc tures, Ji Yao Shen, Elias G. Abu-Saba, William M. McGinley, Lonnie Sharpe, Jr. and Lawrence W. Taylor, Jr., AS Oct. 94, p435-445.
- Coupling Translation and Rocking Motions, J. P. Lee and J. A. Bohinsky, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p61-66.
- A Distributed Parameter Model for the Dynamic Analysis of Beam-like Structures with Varied Sectional Properties, Ji Yao Shen, Elias G. Abu-Saba, William M. McGinley, Lonnie Sharpe, Jr. and Lawrence W. Taylor, Jr., (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p110-123
- Dynamic Analysis of a High Speed Transport Model by Using a Piecewise Continuous Timoshenko Beam Model, Ji Yao Shen and William M. McGinley, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p27-36.

Dynamic Analysis of Unstable Structural Systems With Prescribed Velocities, Ken-ichi Miyazaki, Yasuhiko Hangai and Ken-ichi Kawaguchi, (Spanal, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p239-248.

Dynamic Linear Back Calculation of Pavement Material Parameters, Jacob Uzan, TE Jan./Feb. 94, p109-126.

Dynamic Model for Analysis of Concrete Pavements. Karim Chatti, John Lysmer and Carl L. Monismith, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p984-989.

Earthquake Response of Flat-Slab Buildings, Ahmad J. Durrani, S. T. Mau, Amr Ahmed AbouHashish and Yi Li, ST Mar. 94, p947-964.

Energy-Based Dynamic Analysis of Secondary Systems, Genda Chen and T. T. Soong, EM Mar. 94, p514-534.

Integrated Analytical Procedure for Concrete Slabs Under Impact Loads, Ayaho Miyamoto, Michael William King and Manabu Fujii, ST June 94, p1685-1702.

Lumped Mass Modelling for the Dynamic Analysis of Aircraft Structures, Elias G. Abu-Saba, Ji-Yao Shen and William M. McGinley, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p124-134.

Macroelement Model for Shear Wall Analysis, Jerome M. James and Sashi K. Kunnath, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1505-1512

Pile Settlement Based on Dynamic Measurements, Samuel G. Paikowsky, Valerie A. LaBelle, John E. Regan and Les R. Chernauskas, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p269-278.

Prediction of Observed Bridge Response with Soil-Pile-Structure Interaction, N. Makris, D. Badoni, E. Delis and

G. Gazetas, ST Oct. 94, p2992-3011.

Seismic Behaviour of Tall Guyed Telecommunication Towers, Ghyslaine McClure and Eduardo I. Guevara, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p259-268.

Seismic Hazard Analysis of Nonlinear Structures. II: Applications, Paolo Bazzurro and C. Allin Cornell, ST Nov. 94, p3345-3365.

Simplified Dynamic Analysis for Gravity Dams, A. Ghobarah, Ahmad El-Nady and Tarek Aziz, ST Sept. 94, p2697-2716.

State and Resource Based Construction Process Simulation, Julio Martinez, Photios G. Ioannou and Robert I. Carr, (Computing in Civil Engineering,

Khozeimeh, ed., 1994), p177-184.

Study on Reinforced Concrete Cylindrical Shells with Edge Members under Impact Loading, Kazuhiko Mashi-ta, Hidehiro Yoshitake, Masaya Noguchi and Masatoshi Hotta, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p847-856.

Transient Response of Guyed Telecommunication Towers Subjected to Cable Ice-Shedding, Ghyslaine McClure and Na Lin, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U.

Penalba, ed., 1994), p801-809.

Vibration of Suspension Bridges Under Vehicular Move-ment, P. K. Chatterjee, T. K. Datta and C. S. Surana, ST Mar. 94, p681-703

Dynamic characteristics

Braced Double Skinned Structure in Lunar Application, Hamid R. Adib-Jahromi, Ramesh B. Malla and Michael A. Accorsi, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p47-56.

Lumped Mass Modelling for the Dynamic Analysis of Air-craft Structures, Elias G. Abu-Saba, Ji-Yao Shen and William M. McGinley, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p124-134.

Shock-tested R. C. Slabs: Significant Parameters, François
Toutlemonde and Pierre Rossi, (Structures Congress XII), N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p227-232

Dynamic loads

Comparison of Donnell and Higher Order Nonlinear Models for Dynamically Loaded Composite Plates and Shells, Arthur E. Forral and Anthony N. Palazotto, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p99-108.

Computer Model Pointing to Dynamic Instability of Lift Slab Structure, Rusk Masih, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1832-1838.

Continuous Pulse Control of Structures with Material Nonlinearity, Chris P. Pantelides and Paul A. Nelson, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p300-309.

Controlled Dynamic Cracking of High-Strength Concrete Specimens, David Z. Yankelevsky and Itzhak Avnon,

MT Nov. 94, p564-577

Discrete Modeling of Soil-Structure Interaction Under Dynamic Loading, Grzegorz Bak, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p873-876.

Dynamic Interaction of Bridge and Moving Loading, A. Al-Sewaadi and A. Fafitis, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p77-93.

Dynamic Loading of a Rigid Frame Bridge, Dongzhou Huang, Ton-Lo Wang and Mohsen Shahawy, (Structures Congress XII, N. C. Baker, ed. and Barry J. Lood-

no, ed., 1994), p85-90.

Dynamic Loading of Airfield Pavements Caused by Air-craft Operations on Rough Runways, Anthony G. Gerar-di and Wayne G. Johnson, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed.,

1994), p30-41. Dynamic Model for Analysis of Concrete Pavements, Karim Chatti, John Lysmer and Carl L. Monismith, (Structures Congress XII, N. C. Baker, ed. and Barry J. Lood-

no, ed., 1994), p984-989.

Dynamic Pavement-Strain Histories from Moving Traffic Load, Zia Zafir, Raj Siddharthan and Peter E. Sebaaly, TE Sept./Oct. 94, p821-842.

Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993, 0-87262-946-5,

165pp.

Experimental Measurements of Dynamic Loads Imposed by Moving Crowds, A. Ebrahimpour, R. L. Sack, W. N. Patten and A. Hamam, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1385-1390.

Influence of Geotextiles on Performance of Saline Sebkha Soils, Sahel N. Abduljauwad, Fouad Bayomy, Abdul-Karim M. Al-Shaikh and Omar S. Baghabra Al-Amoudi, GT Nov. 94, p1939-1960.

Limit States Analysis of Masonry Arches, Thomas E. Boothby, (Structures Congress XII, N. C. Baker, ed. and

Barry J. Loodno, ed., 1994), p797-802.

Load Rate Effects on Concrete Compressive Strength, Joseph W. Tedesco, C. Allen Ross and Mary L. Hughes, (Structures Cong. 'ss XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p245-251.

Optimization for Earthquake Loads, Kevin Z. Truman and Franklin Y. Cheng, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p123-132.

Response of Truss Structures Subjected to Dynamic Loads During Member Failure, Ramesh B. Malla and Butchi, B. Nalluri, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p249-258.

Settlement of Dynamically Compacted Deposits, Robert G. Lukas and Norman H. Seiler, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1590-1601.

Simulation of Blast Pressure on Flexible Panels, Avinash C. Singhal, Debra Larson, Sanjay Govil and Vikram Karmakar, ST July 94, p2011-2020. Stability of Lift Slab Structure During Construction Stage,

Rusk Masih, (*Structures Congress XII*, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p271-277.

Steel-Concrete Interaction by Means of Film Sensors,

Marco di Prisco and Alessandro Gandelli, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p815-820.

Three-Dimensional Dynamic Response of Twin Cavities due to Traveling Loads, F. Guan and I. D. Moore, EM Mar. 94, p637-651.

Dynamic models

Dynamic Model for Analysis of Concrete Pavements, Karim Chatti, John Lysmer and Carl L. Monismith, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p984-989.

Dynamic pile driving formulas

Simplified Dynamic Method for Pile-Driving Control, Robert Y. Liang and Abdallah I. Husein, GT Apr. 93, p694-713.

Dynamic pressure

Dynamic Lateral Pressures Due to Saturated Backfills on Rigid Walls, Isao Ishibashi, Makoto Osada and Tatsuo Uwabe, GT Oct. 94, p1747-1767.

Gust Speeds in Hurricanes, R. D. Marshall, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1457-1462.

Dynamic programming

Conjunctive Operation of Hydroelectric and Thermal Power Plants, Ricardo Harboe, Tirtha Raj Gautam and Pushpa Raj Onta, WR Nov./Dec. 94, p778-793

Differential Dynamic Programming for Estuarine Manage-ment, Guihua Li and Larry W. Mays, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p653-656.

Efficient Path Planning Strategies for Unmanned Rover Vehicles, Kevin K. Gifford and George W. Morgenthaler, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1288-1308.

Evaluating Multi-Purpose Reservoir Operations Using Fuzzy Dynamic Programming, Enrique Moncada, Darrell G. Fontane and Timothy K. Gates, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p111-114.

Evaluating the Steady State Stochastic Dynamic Programming Model for the High Aswan Dam, H. Abdelkader, J. Labadie and D. Fontane, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p826-829.

Grey Dynamic Programming for Waste-Management Planning under Uncertainty, Guo H. Huang, Brian W. Baetz and Gilles G. Patry, UP Sept. 94, p132-156.

Multi-Reservoir Systems Optimization by the Aggrega-tion/Decomposition Methodology, M. Bessa, K. Pon-nambalam and A. Bogobowicz, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p192-196.

Optimal Pump Operations Considering Pump Switches, Kevin E. Lansey and Kofi Awumah, WR Jan./Feb. 94,

Parallel SDP for Multi-Reservoir Management, Elizabeth A. Eschenbach, Christine A. Shoemaker and Hugh M. Caffey, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p818-821.

Scada System Requirements for Optimum Pumping, Vilas Nitivattanannon, Elaine C. Sadowski and Rafael G. Quimpo, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p110-114

Strategic Ship Routing Impacts of Temporal Coverage with Real-time Satellite Altimeter-Based Current Information, Young-Kyun Lee, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p483-489.

Uncertainty in Reservoir Operation Optimisation, Kevin S. Tickle and Ian C. Goulter, (Water Policy and Manage ment: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p363-367.

Weighted Feedback for Groundwater Remediation, C. A. Shoemaker, G. J. Whiffen and J. A. Denu, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p189-192.

Dynamic properties

Cyclic Behavior of Gravelly Soil, Mark D. Evans and Shengping Zhou, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p158-176.

Dynamic Properties of Gravel Layers Investigated by In-Situ Freezing Sampling, Takeji Kokusho and Yukihisa Tanaka, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994).

Dynamic Properties of Gravels Sampled by Ground Freez-ing, Shigeru Goto, Shin'ya Nishio and Yoshiaki Yoshimi, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p141-157.

Dynamic Response of Steel Fiber Reinforced Concrete, David H. Sanders and Qiudong Wu, (Structures Con-gress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p833-838.

In-Situ Measurements of Dynamic Soil Properties and Liq-uefaction Resistances of Gravelly Soils at Keenleyside Dam, Ken K. Y. Lum and Li Yan, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p221-240.

Dynamic response

Comment on Global/Local Method for Low-Velocity Impact Problems, Minggang Zhou and William P. Schon-berg, EM May 94, p1042-1056.

Computer Model Pointing to Dynamic Instability of Lift Slab Structure, Rusk Masih, (Computing in Civil Engi-neering, Khalil Khozeimeh, ed., 1994), p1832-1838. Computing Response of Tanks with Two Liquids, Yu

Tang, ST Dec. 94, p3668-3674.

Constitutive Model for Viscoelastic-Fluid Dampers, Nicos Makris, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p857-862.

Cyclic Threshold Shear Strains in Soils, Mladen Vucetic, GT Dec. 94, p2208-2228.

Dynamic Behavior of Slant-Legged Rigid Frame Highway

Bridge, Ton-Lo Wang, Dongzhou Huang and Mohsen Shahawy, ST Mar. 94, p885-902. Dynamic Effects of Progressive Member Failure on the Re-

sponse of Truss Structures, Ramesh B. Malla, Baihai Wang and Butchi B. Nalluri, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p60-76.

Dynamic Green's Functions of Homogeneous Poroelastic Half-Plane, T. Senjuntichai and R. K. N. D. Rajapakse,

EM Nov. 94, p2381-2404.

Dynamic Interaction of Bridge and Moving Loading, A. Al-Sewaadi and A. Fafitis, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p77-93

Dynamic Modal Responses of Wave-Excited Offshore Structures, G. D. Hahn and J. R. Sanghvi, EM Apr. 94, p893-908.

Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993, 0-87262-946-5,

Dynamic Response of Steel Fiber Reinforced Concrete, David H. Sanders and Qiudong Wu, (Structures Con-gress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p833-838.

Dynamic Response of Tank Containing Two Liquids, Yu Tang, EM Mar. 93, p531-548.

The Effect of Member Snap on Progressive Collapse of Space Structures, Nicholas F. Morris, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p17-31.

Effects of Sea Surface Movement on Offshore Structures, G. D. Hahn, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1478-1483.

Estimation of Structural Damping of Buildings, Yukio Tamura, Masaaki Yamada and Haruhiko Yokota, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1012-1017.

Free-Vibration Analysis of Tank Containing Two Liquids, Yu Tang, EM Mar. 94, p618-636.

Guidelines to Minimize Floor Vibrations from Building Occupants, Sarah E. Mouring and Bruce R. Ellingwood, ST Feb. 94, p507-526.

Impact of Non-Gaussian pdf on Reliability Estimates for Deep Water Platforms, John M. Niedzwecki, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1463-1465.

Importance of Speed and Frequency in Flexible Pavement Response, M. S. A. Hardy and D. Cebon, EM Mar. 94,

p463-482.

Modal Interaction in the Response of Laminates, Jamal F. Nayfeh, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p89-98.

Nonlinear Axial Interaction in Pile Dynamics, Mohamed H. El Naggar and Milos Novak, GT Apr. 94, p678-696.

Nonlinear Dynamic Response of an RC Structure with Advanced Cladding, Loai F. El-Gazairly, Barry J. Goodno and James I. Craig, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1262-1267.

Nonlinear Model for Dynamic Axial Pile Response, Mohamed H. El Naggar and Milos Novak, GT Feb. 94,

p308-329.

Physical Model Tests of Dolos Impact Stresses, J. M. Stallings and J. W. Tedesco, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p67-72

Random Vibration of Beam under Moving Loads, Giuseppe Ricciardi, EM Nov. 94, p2361-2380. Responses of Dynamic Systems Excited by Non-Gaussian

Pulse Processes, Sau-Lon James Hu, EM Sept. 93, p1818-1827

Scale and Modeling Effects in Concrete Armor Experiments, Jeffrey A. Melby and George F. Turk, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p686-700.

Seismic Behavior of Type PR Steel Frames, K. S. Sivakumaran and Sanjiang Chen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p585-590.

Seismic Liquefaction Potential Assessed by Neural Net-works, Anthony T. C. Goh, GT Sept. 94, p1467-1480.

Seismic Response of Concrete Tilt-Up Systems, Sharon I Wood and Neil M. Hawkins, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1484-1489.

Seismic Response Studies on a Two Span Slab-On-Girder Bridge, J. B. Mander, S. S. Chen, D-K. Kim and D. S. MacEwan, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p361-366.

Small Scale Dynamic Structures and Their Sedimentation Effects in Estuarine Environment, Chaoyu Wu and Jiaxue Wu, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p158-174.

Structural Damage Identification from Dynamic-Test Data Juan R. Casas and Angel C. Aparicio, ST Aug. 94,

p2437-2450.

Three-Dimensional Dynamic Response of Twin Cavities due to Traveling Loads, F. Guan and I. D. Moore, EM Mar. 94, p637-651.

Uplifting Response of Unanchored Liquid-Storage Tanks, P. K. Malhotra and A. S. Veletsos, ST Dec. 94, p3525-

Vibration of Foundations on Incompressible Soils with No Elastic Region, Ronaldo I. Borja and Wen-Hwa Wu, GT Sept. 94, p1570-1592.

Dynamic stability

Dynamic Stability of Imperfect Frames Under Joint Displacements, D. S. Sophianopoulos and A. N. Kounadis, EM Aug. 94, p1661-1674.

Stability of Lift Slab Structure During Construction Stage, Rusk Masih, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p271-277.

Dynamic tests

Diaphragm Action of Cladding in Low-Rise Metal Build-ings, Bala Sockalingam, David Montgomery, Scott Schiff and Peter Sparks, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1048-1053.

Low Strain Dynamic Testing of Wood Piles Supporting an Existing Pier, Mohamad Hussein, William Billy Edge, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p940-945.

Static Pile Load-Movement From Dynamic Measurements, Frank Rausche, Mohamad Hussein, Garland Likins and Gabriel Thendean, (Vertical and Horizontal Deforma-tions of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p291-302.

Structural Damage Identification from Dynamic-Test Data, Juan R. Casas and Angel C. Aparicio, ST Aug. 94, p2437-2450.

Dynamics

Alternative Approach to Estimation of Critical Cornering Speed, John D. Leonard, II, TE May/June 94, p478-496. Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Mar-cel, ed. and Nicholas C. Kraus, ed., 1994, 0-7844-0043-

1, 983pp.

A Computer-Integrated Approach to Teaching Engineering Mechanics, Shahram E. Zanganeh and Robert E. Efimba, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1265-1272.

Dynamic Behavior of Nonlinear Cable System. III, Dan M. Ghiocel and Dario A. Gasparini, EM Dec. 94, p2694-2712

Dynamic Compaction of Loose Granular Soils: Effect of Print Spacing, Y. K. Chow, D. M. Yong, K. Y. Yong and S. L. Lee, GT July 94, p1115-1133.

Dynamic Interface Shear Strength Properties of Geomembranes and Geotextiles, M. K. Yegian and A. M. Lahlaf, GT May 92, p760-779.

Dynamic Modeling and Response of Soil-Wall Systems, Anestis S. Veletsos and Adel H. Younan, GT Dec. 94, p2155-2179.

Dynamic Optimization by Small Variation of the System Layout, Zdzislaw A. Parszewski, (Engineering, Con-struction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1492-1503.

Dynamic-Behavior Modeler for Material Handling in Con-struction, Yvan J. Beliveau and Taylan Dal, CP July 94,

p269-285

Dynamics of Elastic Cable Under Parametric and External Resonances, Y. Cai and S. S. Chen, EM Aug. 94, p1786-1802

Dynamics of Laminated Plates with Layer Waviness, Raouf A. Raouf, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p109-115.

Effect of Initial Curvature on Natural Frequency of Thin Plate on Hinge Supports, Qiulin Yu, Naser Mostaghel and Kuan-Chen Fu, EM Apr. 94, p796-813.

Equations for Tapered Thin-Walled Beams of Generic Open Section, Sundaramoorthy Rajasekaran, EM Aug. 94, p1607-1629.

Generalization of Optimal Control Theory: Linear and Nonlinear Control, J. N. Yang, Z. Li and S. Vongchavalitkul, EM Feb. 94, p266-283

Hurricane Iniki Effects on Coral Sand and Beach Processes on Kauai, Hans-Jürgen Krock and Doug Neill, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p782-790.

Impact of Weight Falling onto the Ground, Jose M. Roesset, Eduardo Kausel, Vicente Cuellar, Jose L. Monte and Julian Valerio, GT Aug. 94, p1394-1412.

Influence of Wave Groups on Stability of Berm Breakwaters, Kevin R. Hall, WW Nov./Dec. 94, p630-636.

Instability of Tapered Thin-Walled Beams of Generic Section, Sundaramoorthy Rajasekaran, EM Aug. 94, p1630-1640.

Mathematical Models to Assess Stream Dynamics, Laura Bittner, Yarko Niño and Marcelo García, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p391-395.

Methodology for Optimum Sensor Locations for Parameter Identification in Dynamic Systems, Firdaus E. Udwadia, EM Feb. 94, p368-390.

- On the Dynamics and Control of Flexible Orbiting Systems: An Approach with Application, V. J. Modi and A. Suleman, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1-17.
- Particle Dynamics and Bed Level Adjustments in a Mountain Stream, Paul A. Carling, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p839-843.
- Salinity and Dissolved-Oxygen Dynamics in a Wind-Driven Estuary, Jerad D. Bales and R. G. Garrett, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1311-1315.
- Simulation of Multi-Dimensional, Anisotropic Ground Motions, O. Ramadan and M. Novak, EM Aug. 94, p1773-1785.
- Stochastic Control With Bounded Sample Paths: An Application to Reservoir Systems, S. G. Fletcher and K. Ponnambalam, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1025-1029.

Earth pressure

- Design & Construction of the Liberty Street Bridge Earth Support System, David R. Chapman, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), n112-129
- Dynamic Lateral Pressures Due to Saturated Backfills on Rigid Walls, Isao Ishibashi, Makoto Osada and Tatsuo Uwabe, GT Oct. 94, p1747-1767.
- Dynamic Modeling and Response of Soil-Wall Systems, Anestis S. Veletsos and Adel H. Younan, GT Dec. 94, p2155-2179.
- Generalized Coulomb Active Earth Pressure for a Distanced Surcharge, Ernesto Motta, GT June 94, p1072-1079.
- Hybrid Finite Element/Discrete Element Model for Large Deformation Geotechnical Engineering Problems, Isan Ishibashi, Tarun K. Agarwal and You Wang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p857-864.
- The Performance and Behaviour of Biological Filter Walls as Affected by Cyclical Temperature Changes, George L. England, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p57-76.
- Racine's Water Street Retaining Wall, Steven W. Hunt, Randy L. Frank, Paul A. Tarvin and James J. Blazek, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p137-154.
- Vertical Uplift Capacity of Horizontal Anchors, Kanakapura S. Subba Rao and Jyant Kumar, GT July 94, p1134-1147.

Earth reinforcement

- Bearing Capacity of Rectangular Footings on Geogrid-Reinforced Sand, Temel Yetimoglu, Jonathan T. H. Wu and Ahmet Saglamer, GT Dec. 94, p2083-2099.
- Design & Construction of the Liberty Street Bridge Earth Support System, David R. Chapman, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p112-129
- Experimental Behavior of Polymeric Geogrids in Pullout, Ragui F. Wilson-Fahmy, Robert M. Koerner and Leonard J. Sansone, GT Apr. 94, p661-677.
- Lunar Base Construction Using the Reinforce Earth Method with Geotextile, Mikiya Okumura, Yasuhiro Ohashi, Takao Ueno, Shojiro Motoyui and Kiosuke Murakawa, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), pl 106-1115.
- Performance Summary of the Tanque Verde Project-Geogrid Reinforced Soil Retaining Walls, James G. Collin, Donald G. Bright and Ryan R. Berg, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p43-56.
- Reinforcing Sand With Strips of Reclaimed High-Density Polyethylene, Craig H. Benson and Milind V. Khire, GT May 94, p838-855.

Earth structures

- Design & Construction of the Liberty Street Bridge Earth Support System, David R. Chapman, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p112-129.
- Experimental Behavior of Polymeric Geogrids in Pullout, Ragui F. Wilson-Fahmy, Robert M. Koerner and Leonard J. Sansone, GT Apr. 94, p661-677.
- on the Erodibility of Rock and Other Earth Materials, George W. Annandale and Hendrik A. D. Kirsten, (Hydraulic Engineering) 94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p68-72.
- Performance Summary of the Tanque Verde Project-Geogrid Reinforced Soil Retaining Walls, James G. Collin, Donald G. Bright and Ryan R. Berg, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p43-56.
- A Procedure for Predicting Seismic Deformation of Earth Structures, Hendra Jitno and Peter M. Byrne, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p711-725.
- Pseudostatic Seismic Stability of Slopes: Design Charts, Dov Leshchinsky and Ka-Ching San, GT Sept. 94, p1514-1532.
- Quality Management of Earthwork Using Knowledgebased Systems, Shrinath J. Kotdawala and Imad A. Basheer, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p426-429.
- Selection of Earth Retention Systems Using Expert System, V. Sinha, M. Arockiasamy and A. Sinha, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p418-425
- Temporary Shoring Support Systems in an Urban Environment, John E. Reinfurt, Thomas C. Anderson, Paul Reitz and Tony Licari, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p24-42.
- Working Stress Design Method for Reinforced Soil Walls, Mauricio Ehrlich and James K. Mitchell, GT Apr. 94, p625-645.

Earthmoving

- An Artificial Neural Network Approach to Allocating Construction Resources, Abdullah M. Alsugair and David Y. Chang. (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p950-957.
- A Goal Driven Approach to Discrete Event Simulation, Abdullah M. Alsugair and David Y. Chang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p515-522.
- Graphical-Based Productivity Transient Investigation Using DISCO, Rong-Yau Huang and Jorge A. Vanegas, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1-8.
- Simulation Verifies Queuing Program for Selecting Loader-Truck Fleets, Foad Farid and Thomas L. Koning, CO June 94, p386-404.

Earthquake damage

- 1988 Armenia Earthquake. I: Seismological, Geotechnical, and Structural Overview, M. K. Yegian, V. G. Ghahraman and G. Gazetas, GT Jan. 94, p1-20.
- 1988 Armenia Earthquake. II: Damage Statistics Versus Geologic and Soil Profiles, M. K. Yegian, V. G. Ghahraman and G. Gazetas, GT Jan. 94, p21-45.
- Aftershocks: The Legacy of Loma Prieta, John Prendergast, CE Jan. 94, p46-49.
- ASCE Investigators Take a Look at Los Angeles' Lifelines in Earthquake's Aftermath, NE Apr. 94, p2-3.
- Caltrans Seismic Rehab in Fast Lane, CE June 94, p11. Debate Continues Over Steel-Weld Performance, CE Aug.
- 94, p17.
 Deformation of Sand Foundations Induced by Earth-quakes, Xiangwu Zeng, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T.
- Yeung, ed. and Guy Y. Félio, ed., 1994), p726-739. Effects of Site Conditions of Earthquake-Resistant Design of Structures, Vitelmo V. Bertero and Eduardo Miranda, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p561-566.

Foundation Deformation Due to Earthquakes, Ricardo Dobry, (Vertical and Horizontal Deformations of Foun-dations and Embankments, Albert T. Yeung, ed. and

durins and Emantionents, Augett 1: Teang, etc. and Guy Y. Félio, ed., 1994), p1846-1863. Ground-Motion and Soil-Response Analyses for Len-inakan, 1988 Armenia Earthquake, M. K. Yegian, V. G. Ghahraman and G. Gazetas, GT Feb. 94, p330-348.

High Modulus Glass-ceramic Fiber Reinforced Composites for Currently Emerging Infrastructure Applications, Frederick T. Wallenberger, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p272-279

Liquefaction-Induced Damage to Buildings in 1990 Luzon Earthquake, Kohji Tokimatsu, Hisaya Kojima, Shinichi Kuwayama, Akio Abe and Saburoh Midorikawa, GT

Feb. 94, p290-307.

Methodology for Forensic Investigations of Seismic Dam-age, Duane Castaneda and Colin Brown, ST Dec. 94, p3506-3524.

Nonlinear Dynamic Response of an RC Structure with Advanced Cladding, Loai F. El-Gazairly, Barry J. Goodno and James I. Craig, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1262-1267. Northridge Earthquake, CE Mar. 94, p40-47.

The Northridge Warning Has 3-D Design Been Lost?, CE

Dec. 94, p6.

Northridge: Questioning Our Codes, Virginia Fairweather,

CE June 94, p60-63.

Performance of Wood-Framed Structures in the January 17, 1994, Northridge Earthquake, David J. Akers, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p662-668.

Post-Cyclic Consolidation Behavior of Loose Sands, J. C. Chern and C. C. Lin, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p740-747. Postearthquake Deformation Analysis of Wildlife Site, W. H. Gu, N. R. Morgenstern and P. K. Robertson, GT Feb.

94, p274-289.

Quake Aid on the Way, CE Mar. 94, p114. Reliability and Response Control of R/C Buildings, A. H-S. Ang and D. de Leon, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1593-1599. Road to Recovery, Ray Zelinski, CE Apr. 94, p36-39.

Seismic Analysis of Failure and Loss of Function of Water Pumping Facilities, M. A. Cassaro, S. E. Hamburg, D. An and M. J. Cassaro, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1208-1213. Seismic Evaluation of the Macy Street Bridge, Los Ange-

les, California, Using 3-D Nonlinear Pushover Methodologies, John C. Castro and Jason S. Maxwell, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994). p1099-1105.

Seismic Issues in Structural Engineering Codes and Practice, Vilas Mujumdar, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1214-1219. Seismic Rehab Continues on Steel-Framed Buildings, CE

Oct. 94, p12,14.

Seismic Response and Retrofitting of Non-Ductile Reinforced Concrete Bridges, James Ricles, Yueh-Shiun Yang and M. J. Nigel Priestley, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1226-1231.

Seismological, Soil and Valley Effects in Kirovakan, 1988 Armenia Earthquake, M. K. Yegian, V. G. Ghahraman

and G. Gazetas, GT Feb. 94, p349-365.

Site Effects on Strong Shaking and Seismic Risk: Recent Developments and Their Impact on Seismic Design Codes and Practice, Raymond B. Seed, Stephen E. Dickenson and Chin Man Mok, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p573-578.

Steel May Stave Off Earthquake Damage (ltr), CE May 94, p36,38.

Study Takes Stock of Metal Building, CE Aug. 94, p8 A User Friendly Microcomputer Program for Liquefaction Potential Analysis, A. H. Wu, J. S. Hsu and A. Urzua, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p843-848.

'Repeat' Quakes May Cause Fewer Deaths, More Damage,

CE Nov. 94, p19,21.

Earthquake engineering

1988 Armenia Earthquake. I: Seismological, Geotechnical, and Structural Overview, M. K. Yegian, V. G. Ghahraman and G. Gazetas, GT Jan. 94, p1-20.

After the Quake: Why One Building Still Stands, CE June 94, p32,35. ASCE Urges Passage of Bills on Pollution Control and

Earthquake Hazards Reduction, NE July 94, p2. Continuous Pulse Control of Structures with Material Nonlinearity, Chris P. Pantelides and Paul A. Nelson, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p300-309.

Cooper Is 1993 FHWA Engineer of the Year, NE May 94,

p14.

Cyclical Behavior of Welded Steel Shear Studs, Kurt Michael McMullin and Abolhassan Astaneh-Asl, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1024-1029.

Design, Not Material, Dictates Earthquake Survival (ltr), CE Sept. 94, p36.

Dynamic Interface Shear Strength Properties of Geomembranes and Geotextiles, M. K. Yegian and A. M. Lahlaf, GT May 92, p760-779. Lifeline Engineering Integrates Infrastructure, CE Jan. 94,

Modeling of Cyclic Moment-Rotation Response of Double-Angle Connections, Mario De Stefano, Antonello De Luca and Abolhassan Astaneh-Asl, ST Jan. 94, p212-229

Northridge Earthquake, CE Mar. 94, p40-47.

Northridge: Questioning Our Codes, Virginia Fairweather, CE June 94, p60-63.

Quick Response to India Earthquake by ASCE Section, CE Feb. 94, p68.

Seismic Retrofit: Strengthening Stiff Columns Not the Answer (ltr), CE June 94, p38,40.

Seismic Retrofits Should be Required (ltr), CE July 94, p28.

A Smoother Ride to Vibration Damping, CE May 94, p13-14 Steel May Stave Off Earthquake Damage (ltr), CE May 94,

p36,38. Where are the Shear Resistors? (ltr), CE June 94, p38. With Base Isolation, You Can't Break City Hall, CE Sept.

94, p14. Earthquake excitation

Discontinuous Control of Seismic-Excited Nonlinear and Hysteretic Structures, J. N. Yang, Z. Li and J. C. Wu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p393-398.

Estimation of Structural Damping of Buildings, Yukio Tamura, Masaaki Yamada and Haruhiko Yokota, (Structures Congress XII, N. C. Baker, ed. and Barry J. Lood-

no, ed., 1994), p1012-1017.

Evaluation of Code Accidental-Torsion Provisions from Building Records, Juan Carlos De la Llera and Anil K. Chopra, ST Feb. 94, p597-616.

Feasibility Study of Adaptive Control of Structures Under Seismic Excitation, R. A. Burdisso, L. E. Suarez and C. R. Fuller, EM Mar. 94, p580-592.

Frequency Domain Optimal Control Strategies for Aseismic Protection, B. F. Spencer, Jr., J. Suhardjo and M. K. Sain, EM Jan. 94, p135-158.

Investigation of Performance of Bridge Abutments in Seismic Regions, Raj Siddharthan, Mahmoud El-Gamal and Emanuel A. Maragakis, ST Apr. 94, p1327-1346. Liquefaction Mechanism for Layered Soils, Gregg L.

Fiegel and Bruce L. Kutter, GT Apr. 94, p737-755. Seismic Behavior of Open-Web Truss-Moment Frames, Subhash C. Goel and Ahmad M. Itani, ST June 94,

p1763-1780. Seismic Retrofit: Strengthening Stiff Columns Not the Answer (ltr), CE June 94, p38,40.

A Shear-Flexure Model for Non-Ductile Reinforced Concrete Bridge Columns under Biaxial Seismic Loading, Yueh-Shiun Yang, James Ricles and M. J. Nigel Priestley, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1232-1237.

State-of-the-Art Report on Seismic Performance of Unreinforced Masonry Buildings, Michel Bruneau, ST Jan. 94, p230-251.

Statistical Response of a Class of Hysteretic Systems, I. I. Orabi and G. Ahmadi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p405-410.

Earthquake loads

Behavior of Gravelly Soils During Seismic Conditions -An Overview, M. E. Hynes, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p117-120.

Equivalent Frame Analysis of Flat Plate Buildings for Seismic Loading, Y. H. Luo, A. J. Durrani and J. P. Conte,

ST July 94, p2137-2155.

ISDP: Integrated Approach to Seismic Design of Reinforced Concrete Structures, William C. Stone and Andrew W. Taylor, ST Dec. 94, p3548-3566.

Optimization for Earthquake Loads, Kevin Z. Truman and Franklin Y. Cheng, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p123-132.

A Procedure for Predicting Seismic Deformation of Earth Structures, Hendra Jitno and Peter M. Byrne, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p711-725.

Reliability-Based Optimum Design for UBC and Nonde-terministic Seismic Spectra, C. C. Chang, J. F. Ger and F. Y. Cheng, ST Jan. 94, p139-160.

Rough Cracks Subjected to Earthquake Loading, Joost

Walraven, ST May 94, p1510-1524.

Seismic Analysis of Reinforced Concrete Building Using Finite-element Techniques, Tom Panayotido and Jayant Vir. (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1091-1098.
Seismic Renewal of Civil Infrastructure Systems, M. P.

Singh and S. C. Liu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1508-1513.

Seismic Vulnerability of Flat Slab - Core Buildings, Somaprasad R. Hosahalli and Ahmet E. Aktan, ST Feb.

94, p339-359.

A Shear-Flexure Model for Non-Ductile Reinforced Concrete Bridge Columns under Biaxial Seismic Loading, Yueh-Shiun Yang, James Ricles and M. J. Nigel Priestley, (Structures Congress XII, N. C. Baker, ed. and Barry

J. Loodno, ed., 1994), p1232-1237.
Simulated Seismic Load Tests on Reinforced Concrete Columns, S. Watson and R. Park, ST June 94, p1825-

Steel May Stave Off Earthquake Damage (ltr), CE May 94,

p36,38 Teaching Structural Loading: A Case Study, R. Panneer

Selvam, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1375-1378.

Thermal and Seismic Impacts on the North Ramp at Yucca Mountain, M. Lin, M. P. Hardy and J. Jung, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1971-1978.

Earthquake prediction

The Hazard In Using Probabilistic Seismic Hazard Analysis, Ellis L. Krinitzsky, CE Nov. 93, p60-61.

Published Attenuation Functions Compared to 6/29/1992 Little Skull Mountain Earthquake Motion, Renner B. Hofmann and Abou-Bakr K. Ibrahim, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2402-2408.

Earthquake resistant structures

After the Quake: Why One Building Still Stands, CE June 94, p32,35.

After the Quake: Why One Building Still Stands (ltr), CE Sept. 94, p28,30.

Aftershocks: The Legacy of Loma Prieta, John Prendergast, CE Jan. 94, p46-49. Analytical Model for Steel-Jacketed RC Circular Bridge Columns, Y.H. Chai, M. J. N. Priestley and F. Seible, ST Aug. 94, p2358-2376.

Bar Yield Penetration in Monotonically Loaded Anchorages, John F. Bonacci, ST Mar. 94, p965-986.

Changes in Los Angeles Code May Protect Wood Structures (ltr), CE Nov. 94, p32.

Control of Hysteretic System Using Velocity and Accelera-tion Feedbacks, J. N. Yang, Z. Li and S. C. Liu, EM Nov. 92, p2227-2245.

Deflection Amplification Factor for Seismic Design Provi-sions, Chia-Ming Uang and Ahmed Maarouf, ST Aug. 94, p2423-2436.

Dual-Level Approach for Seismic Design of Asymmetric-Plan Buildings, Rakesh K. Goel and Anil K. Chopra, ST Jan. 94, p161-179.

Ductility of Concrete-Filled Steel Box Columns under Cy clic Loading, Tsutomu Usami and Hanbin Ge, ST July

94, p2021-2040.

Earthquake Barrier Technology: Sliding-Friction Energy Dissipation, Marc S. Caspe, (Structures Congress XII,) C. Baker, ed. and Barry J. Loodno, ed., 1994), p1018-

Earthquake Didn't Devastate Water System, CE May 94, p36.

Effects of Site Conditions of Earthquake-Resistant Design of Structures, Vitelmo V. Bertero and Eduardo Miranda, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p561-566.

Generalization of Optimal Control Theory: Linear and Nonlinear Control, J. N. Yang, Z. Li and S. Vongchaval-

itkul, EM Feb. 94, p266-283.

Hi-Tech Seismic Rehabilitation of 'Casino De Montreal', Claude Pasquin, Avtar Pall and Rashmi Pall, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1292-1297

Lightweight Concrete for a Segmental Bridge, Juan A. Mu-rillo, Steve Thoman and Dennis Smith, CE May 94. p68-70.

Macroelement Model for Shear Wall Analysis, Jerome M. James and Sashi K. Kunnath, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1505-1512.
The Northridge Warning Has 3-D Design Been Lost?, CE

Dec. 94, p6. Optimal Design of Base-Isolated Structures with Dynamic Absorbers, S. C. Sinha and Guangning Li, EM Feb. 94,

p221-231.

Performance of Wood-Framed Structures in the January 17, 1994, Northridge Earthquake, David J. Akers, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p662-668.

RCC For Seismic Design, Noel C. Wong, Michael P. Forrest, Sr. and Sze-Hang Lo, CE Sept. 94, p60-62.

Road to Recovery, Ray Zelinski, CE Apr. 94, p36-39. Seismic Lateral Pressures in Soils with Cohesion, R. Richards, Jr. and X. Shi, GT July 94, p1230-1251.

Seismic Response Control of Bridges by Variable Dampers, Kazuhiko Kawashima and Shigeki Unjoh, ST

Sept. 94, p2583-2601. Seismic-Resistant Special Truss-Moment Frames, Subhash

C. Goel and Ahmad M. Itani, ST June 94, p1781-1797 Temperature Effect of Viscoelastic Dampers during Earth-

quakes, C. S. Tsai, ST Feb. 94, p394-409. Tests of Yielding Anchorages Under Monotonic Loadings, John F. Bonacci and Jorge Marquez, ST Mar. 94, p987-

U.S. / Japan Large Scale Cooperative Research Program for Steel Structures, Robert D. Hanson, (Structures Con-gress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p103-108.

'Repeat' Quakes May Cause Fewer Deaths, More Damage, CE Nov. 94, p19,21.

Earthquake simulation models

'Repeat' Quakes May Cause Fewer Deaths, More Damage, CE Nov. 94, p19,21.

Earthquakes

1988 Armenia Earthquake. I: Seismological, Geotechnical, and Structural Overview, M. K. Yegian, V. G. Ghahra-man and G. Gazetas, GT Jan. 94, p1-20.

1988 Armenia Earthquake. II: Damage Statistics Versus Geologic and Soil Profiles, M. K. Yegian, V. G. Ghahra-

man and G. Gazetas, GT Jan. 94, p21-45. Aftershocks: The Legacy of Loma Prieta, John Prendergast, CE Jan. 94, p46-49.

Ranalysis of Earthquake Fault Rupture Propagation through Cohesive Soil, Jonathan D. Bray, Raymond B. Seed and H. Bolton Seed, GT Mar. 94, p562-580.

Analysis of Foundation Settlement Due to Earthquake, Jian Zhou and Jian Du, (Vertical and Horizontal Deforma-tions of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p798-805.

Analysis of Free Vibrations of Tall Buildings, Qiusheng Li, Hong Cao and Guiqing Li, EM Sept. 94, p1861-1876.

Analysis of Site Liquefaction Using Earthquake Records, Mourad Zeghal and Ahmed-W. Elgamal, GT June 94.

Application of Concrete-Filled Steel Tubular Columns in Tall Buildings in Earthquake Area, Chahg-Ji Gong, Xi Lin and Shao-Huai Cai, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p146-151

Applications of Viscoelastic Dampers to High-Rise Buildings, C. S. Tsai and H. H. Lee, ST Apr. 93, p1222-1233.

Beam Model for Base-Uplifting Analysis of Cylindrical Tanks, P. K. Malhotra and A. S. Veletsos, ST Dec. 94, p3471-3488.

Becker Test Results from Gravel Liquefaction Sites, Leslie F. Harder, Jr., (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p201-220.

Characterization of an ER Active Member, Henri P. Gavin and Robert D. Hanson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p863-868.

Computer Applications in Liquefaction Analysis, Sivanuja S. Sundaram and K. K. Muraleetharan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p123-130.

Computing Response of Tanks with Two Liquids, Yu Tang, ST Dec. 94, p3668-3674.

Concrete Buildings in Regions of High Seismicity, S. K. Ghosh, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p31-36.

Conditioned Stochastic Processes for Conditional Random Fields, Hiroyuki Kameda and Hitoshi Morikawa, EM

Apr. 94, p855-875.

Damping Systems for Controlling Wind Induced Motions of Structures, Ahsan Kareem and Yukio Tamura, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p845-850.

Design of Mat Foundation for Egg Shape Digesters, S. S. Ibrahim and M. R. Graves, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p13-18.

Dynamic Modeling and Response of Soil-Wall Systems, Anestis S. Veletsos and Adel H. Younan, GT Dec. 94, p2155-2179.

Dynamic Response of Tank Containing Two Liquids, Yu Tang, EM Mar. 93, p531-548.

Dynamics of Nuclear Power Plant Structures with Foundation Interaction, Samir J. Serhan, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p55-60.

Earthquake Didn't Devastate Water System, CE May 94,

Earthquake Fault Rupture Propagation Through Soil, Jonathan D. Bray, Raymond B. Seed, Lloyd S. Cluff and H. Bolton Seed, GT Mar. 94, p543-561.

Earthquake Response of Flat-Slab Buildings, Ahmad J. Durrani, S. T. Mau, Amr Ahmed AbouHashish and Yi Li, ST Mar. 94, p947-964.

Earthquake-Induced Settlements in Silty Sands for New England Seismicity, Cetin Soydemir, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p77-90.

Evaluation of Soil Liquefaction by Energy Principles, J. Ludwig Figueroa, Adel S. Saada, Liqun Liang and Nitin

M. Dahisaria, GT Sept. 94, p1554-1569.

Extraction of Dynamic Soil Properties Using Extended Kalman Filter, Jeen-Shang Lin, GT Dec. 94, p2100-2117.

Foundation Deformation Due to Earthquakes, Ricardo Dobry, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1846-1863.

Generalized Optimal Active Control with Embedded and Half-space Soil-Structure Interaction, F. Y. Cheng, S. Suthiwong and P. Tian, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p337-346.

Ground-Motion and Soil-Response Analyses for Leninakan, 1988 Armenia Earthquake, M. K. Yegian, V. G. Ghahraman and G. Gazetas, GT Feb. 94, p330-348.

Ground-Motion Spatial Variation Effects on Circular Arch Responses, Hong Hao, EM Nov. 94, p2326-2341.

Harry Seed, Liquefaction & the Gravel Drain, Choule J. Sonu, Hiroshi Oishi and Katsuhiko Ito, CE Dec. 93, p58-60

Impediments to the Implementation of Seismic Isolation, Ronald L. Mayes, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p128-133.

Inelastic Link Element for EBF Seismic Analysis, James M. Ricles and Egor P. Popov, ST Feb. 94, p441-463.

The Influence of Fines Type and Content on Cyclic Strength, Joseph Patrick Koester, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p17-33.

Instantaneous Optimal Control of Building Frames, C. C. Chang and Henry T. Y. Yang, ST Apr. 94, p1307-1326.

An Interactive Computer Code for Generations of Artificial Earthquake Records, D. L. Karabalis, G. J. Cokkinides, D. C. Rizos, J. S. Mulliken and R. Chen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1115-1122.

Involving the Public to Reach Consensus in Water Resources Projects - An Interdisciplinary Perspective, Lee Judd, Ken Steele, Sara Katz and Scott McCreary, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p513-

Liquefaction and Embankment Failure Case Histories, 1988 Armenia Earthquake, M. K. Yegian, V. G. Ghahraman and R. N. Harutiunyan, GT Mar. 94, p581-596.

Liquefaction Characteristics of Silts, Sukhmander Singh, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p105-116. Liquefaction of Artificially Filled Silty Sands, Susumu

Yasuda, Kazue Wakamatsu and Hideo Nagase, (Ground Failures Under Seismic Conditions, Shamsher Prakash,

ed. and Panos Dakoulas, ed., 1994), p91-104. Liquefaction of Silty Soils, Y. P. Vaid, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and

Panos Dakoulas, ed., 1994), p1-16. Liquefaction-Induced Lateral Spreading of Mildly Sloping Ground, Gregg L. Fiegel and Bruce L. Kutter, GT Dec. 94, p2236-2243.

Nonlinear Hydrodynamic Pressures on Arch Dam Faces, Bang-Fuh Chen and Ing-Sen Yuan, (Hydraulic Engi-neering '94, George V. Cotroneo, ed. and Ralph R. Ru-mer, ed., 1994), p411-415.

Nonlinear Model for Building-Soil Systems, D. B. McCallen and K. M. Romstad, EM May 94, p1129-1152.

Nonlinear Response of Torsionally Coupled Base Isolated Structure, R. S. Jangid and T. K. Datta, ST Jan. 94, p1-

Northridge Earthquake, CE Mar. 94, p40-47. Northridge: Questioning Our Codes, Virginia Fairweather, CE June 94, p60-63.

Numerical Simulation of Site Effects, Apostolos S. Papageorgiou, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p567-572. Period-Dependent Effects in Seismic Torsional Response of Code Systems, Adrian M. Chandler, Joseph C. Correnza and Graham L. Hutchinson, ST Dec. 94, n3418-3434. p3418-3434.

Permanent Deformation on Preexisting Sliding Surfaces in Dams, George Gazetas and Nasim Uddin, GT Nov. 94, p2041-2061.

Piezometer Performance at Wildlife Liquefaction Site, California, T. Leslie Youd and Thomas L. Holzer, GT June 94, p975-995.

Planning for Power Outages, ET June/July 94, p10. Postearthquake Deformation Analysis of Wildlife Site, W. H. Gu, N. R. Morgenstern and P. K. Robertson, GT Feb.

94, p274-289.

A Practical Perspective on Liquefaction of Gravels, Julio E. Valera, Michael L. Traubenik, John A. Egan and Jon Y. Kaneshiro, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p241-257.

Prediction of Structural Response to Large Earthquakes by Using Recordings From Smaller Earthquakes, Erdal Şafak, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1391-1396. Preserve and Protect, Loring A. Wyllie, Jr., CE Feb. 94,

p48-51.

Pseudostatic Seismic Stability of Slopes: Design Charts, Dov Leshchinsky and Ka-Ching San, GT Sept. 94, p1514-1532.

Published Attenuation Functions Compared to 6/29/1992 Little Skull Mountain Earthquake Motion, Renner B. Hofmann and Abou-Bakr K. Ibrahim, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2402-2408. Quake an Act of (Human) Nature?, CE June 94, p8.

Quick Response to India Earthquake by ASCE Section, CE Feb. 94, p68.

RCC For Seismic Design, Noel C. Wong, Michael P. Forrest, Sr. and Sze-Hang Lo, CE Sept. 94, p60-62.

Recent Developments in Seismic Response of Composite Structures, Bahram M. Shahrooz, David A. Kramer and Mark E. Remmetter, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p158-163.

Response Study of a Flexible Building Using Three Earthquake Records, M. Çelebi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1220-

Robust Active Control of Cable-Stayed Bridge Subjected to Earthquake Ground Motion, Mario E. Magaña, Alan G. Hernried and Dietmar Scheer, (Analysis and Compu-

 Roof-Snow Load for Seismic-Design Calculations, Michael J. O'Rourke and Robert S. Speck, Jr., ST Sept. 92, p2338-2350.

San Diego County Water Authority's Emergency Storage Project Supplying Water During Natural Disasters, Uli Kappus, Ken Steele and Dick Westmore, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p885-888.

Seismic Behavior of Non-Ductile Concrete Frame Structures, Yahya C. Kurama, Stephen P. Pessiki, Richard Sause and Shaojie Wu, (Structures Congress XII, N. C.

Sause and Shadjie wit, Garnetitures Congress Art, rv. Baker, ed. and Barry J. Loodno, ed., 1994), p1496-1501. Seismic Behaviour of Tall Guyed Telecommunication Towers, Ghyslaine McClure and Eduardo I. Guevara, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p259-268.

Seismic Liquefaction Potential Assessed by Neural Networks, Anthony T. C. Goh, GT Sept. 94, p1467-1480. Seismic Parameters from Liquefaction Evidence, James R.

Martin and G. Wayne Clough, GT Aug. 94, p1345-1361. Seismic Performance of Railway Bridges, V. Sharma, J. Choros, E. M. Maragakis and W. G. Byers, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p367-372.

Seismic Random-Vibration Analysis of Multisupport-Structural Systems, Ernesto Heredia-Zavoni and Erik H.

Vanmarcke, EM May 94, p1107-1128.
Seismic Research Program for Highway Construction, Ian
G. Buckle and Ian M. Friedland, (Structures Congress) XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p373-379.

smic Settlement of Shallow Footings on Sands, Awad Al-Karni and Muniram Budhu, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p748-759.

Seismic Strengthening of URM Buildings with Steel Bracing, Durgesh C. Rai, Subhash C. Goel and William T.

ing, Durgesh C., Kai, Suonash C., Goel and William I., Holmes, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p809-814.

Seismic Study of a Cable-Stayed Bridge, K. C. Yiak and S. Pezeshk, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1197-1207.

Seismological, Soil and Valley Effects in Kirovakan, 1988 Armenia Earthquake, M. K. Yegian, V. G. Ghahraman and G. Gazetas, GT Feb. 94, p349-365.

The Significance of Hydrodynamic Forces in Coastal Embankment Design, Bang-Fuh Chen, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p880-889.

Simulation of Multi-Dimensional, Anisotropic Ground Motions, O. Ramadan and M. Novak, EM Aug. 94, p1773-

Slender Rigid Block Motion, S. J. Hogan, EM Jan. 94, p11-24

Spherical Domes Subjected to Horizontal Earthquakes, Haruo Kunieda, Shigehiro Morooka and Koji Onodera, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p229-238.

Strong-Motion Data Processing, A. Gerald Brady and April M. Converse, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1600-1605.

Structural Response to 3D Simulated Earthquake Motions in San Bernardino Valley, Erdal Şafak and Arthur Frankel, ST Oct. 94, p2820-2839.

Temperature Effect of Viscoelastic Dampers during Earthquakes, C. S. Tsai, ST Feb. 94, p394-409.

Tentative Provisions for the Development of Seismic Reg-ulations for Buildings, Roland L. Sharpe, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p116-121.

Three-Dimensional Seismic Analysis of La Villita Dam, A.-W. Elgamal, GT Dec. 92, p1937-1958.

Torsional Response of Unsymmetric Buildings to Incoherent Ground Motions, G. D. Hahn and X. Liu, ST Apr. 94, p1158-1181.

Undrained Shear Strength of Liquefied Sands for Stability Analysis, Timothy D. Stark and Gholamreza Mesri, GT Nov. 92, p1727-1747.

Uplifting Analysis of Base Plates in Cylindrical Tanks, P. K. Malhotra and A. S. Veletsos, ST Dec. 94, p3489-3505

Uplifting Response of Unanchored Liquid-Storage Tanks, P. K. Malhotra and A. S. Veletsos, ST Dec. 94, p3525-

Using Pen Computers in Post-Disaster Insurance Claim Settlements, Raja R. A. Issa, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2145-2148.

Utilizing Visco-Elastic Dampers in the Seismic Retrofit of a Thirteen Story Steel Framed Building, Patrick Crosby, James Kelly and J. P. Singh, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1286-1291.

Variables Affecting Cyclic Behavior of Reinforcing Steel, J. I. Restrepo-Posada, L. L. Dodd, R. Park and N. Cooke, ST Nov. 94, p3178-3196.

Model to Estimate Highway Earthwork Cost in Nepal, Naresh Sthapit and Hiroshi Mori, TE May/June 94,

'Dynamic Compaction Used as a Winter Construction Expedient", Lawrence F. Johnsen and Christopher Tonzi, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p68-79.

Eccentric bracing

Inelastic Link Element for EBF Seismic Analysis, James M. Ricles and Egor P. Popov, ST Feb. 94, p441-463.

Design of Imperfect Cross-Bracings, Fred Segal, Robert Levy and Avigdor Rutenberg, EM May 94, p1057-1075.

Eccentricity

Displacement of Batter Piles in Layered Soil, A. S. Yalcin and G. G. Meyerhof, (Vertical and Horizontal Deforma tions of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p975-985.

Eccentric Settlements of a Rigid Foundation on a Consolidating Layer, Zhongqi Yue and A. P. S. Selvadurai, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p612-627.

Explicit Stresses under Rectangular Footings, R. Irles and F. Irles, GT Feb. 94, p444-450.

Hydraulics of Stationary Capsule in Pipe, Henry Liu and James L. Richards, HY Jan. 94, p22-40.

Load-Eccentricity Effects on Cold-Formed-Steel Lipped-Channel Columns, Thomas H. Miller and Teoman Pekoz, ST Mar. 94, p805-823. Torsional Response of Unsymmetric Buildings to Incoherent Ground Motions, G. D. Hahn and X. Liu, ST Apr. 94, p1158-1181.

Ecology

Biosphere II - Its Effects on Space Colonization, Chris Cassidy, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p826-832.

Clean Water is not Enough, James R. Karr, (National Water Resources Regulation: Where is the Environmen-tal Pendulum Now?, Howard Holme, ed., 1994), p79-95.

Climate Warming and Great Lakes Management, Benjamin F. Hobbs, Philip T. Chao, Mohammed Nayal and Wil-liam T. Bogart, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p295-316.

Decision Support System for Wetland Development at a Landscape Level, Luis A. Garcia, Rolando Vadas, Steffen Meyer, John Ternlund and Jack Cunningham, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p291-294.

Freshwater-Inflow Need of Estuary Computed by Texas Estuarine MP Model, Junji Matsumoto, Gary Powell and David Brock, WR Sept./Oct. 94, p693-714.

Kissimmee River Restoration Study, Hsieh Wen Shen, Guillermo Tabios, III and James A. Harder, WR May/ June 94, p330-349.

Risk Management Strategies for Natural, Manmade, and Technological Hazards, Steven R. Cone, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p342-344.

"The Potential for the Department of Defense to Use Space-Based Remote Sensing to Support DOD and Other Government Agencies' Environmental Programs", Donald R. Artis, Jr., (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p542-552.

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ASCE Offers Options for Funding Atlanta's Infrastructure Renewal Program, NE Nov. 94, p1,3.

Compliance With Arsenic Regulations Could Cost Billions, CE Sept. 94, p19-20.

Concept for a Mixed Use Recreational Harbor on Lake Superior, Kenneth M. Cobb and Dorian Grilley, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p104-113.

Consulting-Firm Values Slip during 1993, NE Apr. 94, p5. Continuous Treatment of Textile Water by Ozonation and Coagulation, Sheng H. Lin and Wen Y. Liu, EE Mar./ Apr. 94, p437-446.

Denver's Direct Potable Water Reuse Demonstration Project, William C. Lauer, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p657-660.

Developing Economic Performance Information for Water Management Projects in North China, Ari M. Michelsen and Jona Bargur, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p641-644.

The Economic Cost of Stocking Catchable Rainbow Trout, Donn M. Johnson and Richard G. Walsh, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p549-552.

Equipment Management through Operational Failure Costs, Athanase I. Tsimberdonis and E. Lile Murphree, Jr., CO Sept. 94, p522-535.

Groundwater Modelling As a Management Tool, Courtney C. Hemenway, Al Eddebbarh and Paul Grundemann, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p596-599.

Incorporating Economic Analysis in Irrigation Design and Management, Ujjayant Chakravorty and James Management, Ujjayant Chakravorty Roumasset, WR Nov./Dec. 94, p819-835.

Letter From Moscow, WP Special issue 94, p39.

Lewis and Clark Rural Water System: A Regional Approach to Solving Domestic Water Supply Problems for a Tri-State Area, Pamela A. Bonrud, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p161-164.

Methods and Economics of Drainage Reduction Through Improved Irrigation, Blaine R. Hanson and Allan E. Ful-

ton, IR Mar./Apr. 94, p308-321.

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Missouri River Recreation Economic Analysis, Ronald C. Roberts and R. Scott Jackson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p681-685.

Potential Economic Benefits of the Yucca Mountain Project, Richard A. Babcock, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p642-649.

Relation of Praxeology to Engineering, Ronald A. Chadderton, El Oct. 94, p384-391.

Simulating Hourly Hydropower Operations for the Assessment of Environmental and Economic Impact, David A. Harpman, A. Spreck Rosekrans and Ronald E. Moulton, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p553-556.

Valuation Analysis for Independent Power Project, Richard K. Ellsworth, EY Aug. 94, p86-96.

Water and Wildlife Enhancement with Land Retirement, Earl Ekstrand and Richard Johnson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p541-544.
Water-Treatment-System Design for Turbidity Removal. I:

Simulation, H. B. Dharmappa, S. Vigneswaran, J. Verink and O. Fujiwara, EE July/Aug. 94, p900-920.

Water-Treatment-System Design for Turbidity Removal. II: Optimization, H. B. Dharmappa, O. Fujiwara, J. Ver-ink and S. Vigneswaran, EE July/Aug. 94, p921-942.

What Do SO₂ Emissions Cost? Allowance Prices and Externality Adders, Benjamin F. Hobbs, EY Dec. 94, p122-132.

Willingness and Ability to Pay for Rural Water, Jonathan Platt and Steven Piper, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p157-160.

Yellowman Siphon Rehabilitation, Scott A. Stevens, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p82-88.

Economic conditions

Bonding Easier in '94, Study Predicts, CE Mar. 94, p8. Clients May be Coming Back, CE Jan. 94, p8.

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A Workable Compromise on Flood Control, CE Sept. 94, p6.

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Argentina: Back in Business, Kaitlin Quistgard, WP Spring 94, p19-22.

Balancing Recreational, Economic Development and Environmental Protection Goals for New Recreational Boating Facilities in the State of Wisconsin, U.S.A. Fred Klancnik, James Rooney and Larry Freidig, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p7-19.

The Bladensbug Marina Revitalization Project, Wesley R. Johnson and Kevin H. Deis, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A.

Klancnik, ed., 1994), p439-448.

The Community Options Model@: A PC Tool for Evaluating Community Choices for Marinas and Tourism, Daniel R. Talhelm, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p29-38.

Facilitating Sustainable Development: Is Our Approach Correct? Michael N. T. Cottell, EI July 93, p220-224. Facilitating Sustainable Development: Role of Engineer,

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ing Perspective, Neil S. Grigg, El Jan. 93, p51-61.

A

International Information and Technology Charles G. Gunnerson, El Oct. 91, p336-350.

Minority Contractors: Framework for New Policy Development, Zuhair El-Itr and Roozbeh Kangari, CO Sept. 94, p632-648.

94, po3-20-48. New Cop on the Block, WP Special issue 94, p2. Poorer Is Riskier: Opportunity for Change, Richard C. Schwing, (Risk-Based Decision Making in Water Re-sources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p102-121.

Rebuilding the Former Soviet States: Perspectives on the Construction Market, V. L. Khazanet, WP Spring 94,

p32-36.

Two Case Studies of Marine Parks & Marinas as Economic and Tourism Activity Stimulators in Brazil, Claudio Brasil do Amaral and John C. Corrough, (), p565-576.

Venue: Vietnam, WP Special issue 94, p5.
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Formulation of the Interagency Coordination Team for the Houston-Galveston Navigation Channels, Texas Project, Dalton H. Krueger, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p378-383.

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No-Dig Method Contains Rehab Costs, CE Nov. 94, p86. Optimal Capacity-Expansion Planning in Multiaquifer Sys-tems, Hakan Başagaoglu and Hasan Yazıcıgil, WR Nov./Dec. 94, p836-856.

OSHA Panel Studies Broader Engineer Liability, CE Nov. 94, p108.

Rating the Megaprojects, CE Jan. 94, p8.

The Regulatory Process - An Industry Perspective Re-sponding to New Regulations, Gerald A. Hapka and Robert A. Reich, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p134-144.

Roiled Waters: Water Politics in the 1990s, Teresa Austin,

CE July 94, p49-51.

Seismic Rehab Continues on Steel-Framed Buildings, CE Oct. 94, p12,14. Taking Environmental Tech to Market, ET Oct./Nov. 94,

pll.

Top Design Firms Try New Strategies as Recovery Takes Hold, Survey Finds, NE Aug. 94, p15.

Water Injection Takes the Bucket Out of Dredging, CE

Oct. 94, p21-22,24. Willingness and Ability to Pay for Rural Water, Jonathan

Platt and Steven Piper, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p157-160.

'Repeat' Quakes May Cause Fewer Deaths, More Damage, CE Nov. 94, p19,21.

Economic forecasting Clients May be Coming Back, CE Jan. 94, p8.

Dredging Research Program Economic Benefits Study, Fletcher H. Griffis, Sotiris Pagdadis, Charles E. Jettmar and Russell K. Tillman, (*Dredging '94*, E. Clark McNair,

Jr., ed., 1994), p1335-1354.

Testing the Spatial Neutrality of the REMI Net Migration Equation, Charles F. Barr, Nasser Daneshvary, Thomas A. Perrigo and Dan S. Rickman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p40-47.

Economic growth

Infrastructure: a More Comprehensive Policy is Needed, Neil S. Grigg, El Apr. 94, p183-192.

Economic impact

The Community Options Model@: A PC Tool for Evaluating Community Choices for Marinas and Tourism, Daniel R. Talhelm, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p29-38. Economic Impacts of Severe and Sustained Drought,

Robert A. Young, James F. Booker and Ari M. Michelsen, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p624-627.

The Inflation Equation, Joao Otavio Brizola and Paul C. Dinsmore, WP Special issue 94, p41-44.

Missouri River Economic Impacts Model, Charles Hillerson and Ronald Roberts, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p637-640.

Economic justification

Dredging Research Program Economic Benefits Study, Fletcher H. Griffis, Sotiris Pagdadis, Charles E. Jettmar and Russell K. Tillman, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1335-1354. Ending Gridlock on Ending Gridlock?, CE Nov. 94, p24.

Economic models

Arizona Groundwater Management Alternatives, James F. Booker, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p351-354.

Ending Gridlock on Ending Gridlock?, CE Nov. 94, p24. Uncertainty and Time Preference in Shore Protection, Kevin O'Grady and Leonard Shabman, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p136-154.

Economics

Applying Dredged Material to Recreation Area Development, Russell K. Tillman and Thomas R. Patin, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p271-282.

ASCE Offers Options for Funding Atlanta's Infrastructure Renewal Program, NE Nov. 94, p1,3.

Balancing Environmental Issues when Developing the Marina Project Scope, Jon Guerry Taylor, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p69-76.

Coal Log Pipeline Technology: State of Development, Henry Liu and Charles W. Lenau, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed.,

1994), p280-287.

Cost-Schedule Integration for Cash-Flow Forecasting, Ronie Navon, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1536-1539.

Creation of Landowner Compacts for Sustainable Commu-nity Development, Brian W. Baetz, UP Dec. 94, p174-

Demonstrated Success in Reducing Risk of Losses in a Severe Hurricane: Hurricane Omar Experience, Juan C. Tenorio and Jack B. Jones, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p716-725.

Design of Agricultural Drainage with Adaptive Irrigation Management, Luis A. Garcia, Kenneth M. Strzepek and Terence H. Podmore, IR Jan./Feb. 94, p179-194.

Economic Risk Analysis of Building Codes, James D. Englehardt, Chengjun Peng and Ahmad Namini, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p674-683.

Governmental Priorities in Irrigation Project Selection in Indonesia, Sutardi and I. C. Goulter, WR May/June 93,

p406-411.

The Importance of Hurricane Risk Assessment in Housing and Improved Design and Building Practice Therein, Desmond Imbert, Patrick Drakes and David Prevatt, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p684-695.

The Inflation Equation, Joao Otavio Brizola and Paul C. Dinsmore, WP Special issue 94, p41-44.

Infrastructure and Economic Development: Civil Engineer-

ing Perspective, Neil S. Grigg, El Jan. 93, p51-61. A Knowledge-Based Computer System for Financial Wind Risk Management, Auguste C. Boissonnade and Surya K. Gunturi, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2191-2198.

Knowledge-Based System for Wind Damage to Buildings, Individual Company of the Manager to Buildings of Building to Building to Kishor C. Mehta, Douglas A. Smith and Ronald H. Cheshire, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p726-735.

The Mexican Migration, Virginia Fairweather, WP Spring 94, p13-18.

Pros and Cons of Developing Recreational Facilities on Closed Landfills, Michael S. Golden, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p257-260.

Relation of Praxeology to Engineering, Ronald A. Chadderton, El Oct. 94, p384-391.

Relevant Engineering in 21st Century, Henry J. Hatch, EI July 93, p216-219

Space Exploration: Getting a Handle on "Why?", Gordon R. Woodcock, (Engineering, Construction, and Opera-tions in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p960-968.

Spacecab: A Concept for Commercial Human Spaceflight, Andrew Petro, (Engineering, Construction, and Opera-tions in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1504-1511.

Survivability of Manufactured Housing in Hurricanes, John M. Dye, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p176-184. Synthetic Estimation of Development Cost of Satellite, Yilin Zhu, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1512-1520.

Vietnam: Firsthand Feedback, Virginia Fairweather, WP

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"A Comparison of Characteristics and Economic Expenditures of Boat Show Patrons At Two Types of Boat Shows", Mary H. Bielen, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p248-256.

Ecosystems

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Assessing Stormwater Impacts, G. Allen Burton, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1198-1202.

Clean Water is not Enough, James R. Karr, (National Water Resources Regulation: Where is the Environmen-tal Pendulum Now?, Howard Holme, ed., 1994), p79-95.

Galveston Bay 3D Model Study, Channel Deepening, Cir-culation, and Salinity Results, R. Berger, W. Martin, R. McAdory and J. Schmidt, (Estuarine and Coastal Mod-eling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p1-13.

Impacts of Natural and Manmade Changes on the San Luis Rey River Environment, Chenchayya T. Bathala and W. Jeffery Moncrief, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N.

Tuvel, ed., 1994), p327-330.

Instream and Streambank Environmental Feature Guidelines, J. Craig Fischenich, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p406-410.

Long-Term Evolution of the Biosphere in the Context of High-Level Waste Repository, Marianne Menut and Catherine Valentin-Ranc, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2152-2159.

Protecting the Great Lakes: Asking the Right Questions, Christopher Grundler, (National Water Resources Regu-lation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p107-109.

Restoration of Wetland Ecosystems: A Challenge to Our Nation's Civil Engineers, James T. B. Tripp, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p229-232

The Role of Partnering and Public Involvement in the Lackawanna River Corridor Greenway Study, Robyn S. Colosimo, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel,

ed., 1994), p453-456.

Wet Weather Issues in Receiving Systems: Can a Pendu-lum Swing Upstream? Edwin E. Herricks, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p168-

Why Design Storm Methods Have Become Unethical, William James, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1203-1207.

Nowcast System Development for the Straits of Florida, Christopher N. K. Mooers and Dong-Shan Ko, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p158-171.

Eddy viscosity

Investigation of an Anisotropic k-E Model, Yun Zhang, Yongquan Yang and Chigong Wu, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1280-1284.

Modified Eddy Viscosity Model in Fully Developed Asymmetric Channel Flows, Whey-Fone Tsai and Robert Ettema, EM Apr. 94, p720-732.

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Application of a Geographic Information System to Evaluate Environmental Hazards, Mary J. S. Roth, Deborah L. Shaffer and Roger Ruggles, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p265-272.

Application of OOP and GUI to the Development of Educational Software in Structural Mechanics, S. T. Mau and V. Aruna, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1273-1279.

BRICAL: A Multimedia Intelligent Educational System for Bridge Engineering, Amin Hammad and Yoshito Itoh, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1671-1678.

The BS8110 CAL Program for Teaching RC Design, B. S. Choo, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1663-1670.

Building Code of Australia Expert Assistant – Putting Re-

search into Practice, Ron Sharpe, Stephen Oakes, Philip Haselden and Ian Davidson, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1679-1686.

Case Study of Development of Distance-Learning Course, D. A. Langford, T. Bilham, R. Fellows and R. Newcombe, El Oct. 94, p333-340.

COAST Educational Program for Teaching Structural Analysis, Czeslaw J. Branicki and Jerzy W. Wekezer, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p327-332.

Computer-Assisted Instruction in Civil Engineering, Thomas Froese, Sundar Prasad, Jeff Friesen and Dan Zollman, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p1647-1654.

Computing in Analysis and Design in Structural Engineering Education, Practice and Registration - A Rationale for Dialogue, Subhash C. Anand, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p357-361.

Computing in Analysis and Design in Structural Engineer-ing - An Educator's Point of View, John F. Fleming, (Analysis and Computation, Franklin Y. Cheng, ed.,

1994), p362-368.

Computing in Analysis and Design in Structural Engineer-ing Education, Practice and Registration: A View from the National Council of Examiners for Engineering and Surveying, J. Earl Herndon, Jr., (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p377-385.

onstructivist Learning Model for Ethics Education, Richard H. McCuen, El July 94, p273-278. Constructivist Learning

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dents, CE July 94, p66.

Education and Research in Water and Environment: Collaboration Between Minority and Majority Institutions, Neil S. Grigg, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p81-84.

Education: Goals 2000, CE June 94, p108. Experiences with an Undergraduate Structural Engineering Laboratory, Stephen Pessiki, Le-Wu Lu and Ben T. Yen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1369-1374.

Growing Interest, Growing Programs, Growing Pains: Suc-cessfully Customizing Public Outreach, Mindy Wadkins, Carleen Hill and Theresa Hirsch, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p232-237.

High-Level Radioactive Waste Curriculum Usage, Evaluation, and Customer Focus, Ginger P. King, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p104-111.

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Raising Students' and Educators' Awareness of Radioactive Materials Transport Through Creative Classroom Materials and Exhibits, Judith Holm, Cheryl Sandoz, Jennifer Dickenson, Anne Marie Smith and Jan Cor-telyou Lee, (High Level Radioactive Waste Manage-ment, High Level Radioactive Waste Program Committee, 1994), p213-216.

Redefining the Roles Insurers and Engineers Play in Hurricane Preparedness and Mitigation, Eugene L. Lecomte, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad So-

tani, ed., 1994), p1-9.

Restructuring the Engineering and Engineering Technology Relationship, Russel C. Jones and Robert D. Kersten, El Apr. 93, p153-162.

Simulating Learning Development for Construction, James D. Lutz, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1655-1662.

SteelDEM: An Interactive Multimedia Intelligent Tutor and Teaching Aid for Structural Steel Design, Abbas

Aminmansour, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1458-1464.

Teaching Soil Mechanics Laboratories with Computer Assistance, William Whitaker, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1280-1285.

Teaching Structural Loading: A Case Study, R. Panneer Selvam, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1375-1378.

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Water Resources Education and Research at a Model HBCU Water Resources Center, Victor I. Okereke, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p85-88.

Where do the Arrows Come From? Evaluating Structural Loads, Duane S. Ellifritt, (Structures Congress XII, N. C Baker, ed. and Barry J. Loodno, ed., 1994), p1364-1368.

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Lateral Stiffness of Frames and Effective Length of Framed Columns, Ruhi Aydın and Hasan Gönen, ST May 94, p1455-1470.

Novel Design Algorithms for K Factor Calculation and Beam-Column Selection, N. Agbayani, P. Jayachandran and D. Sriram, ST Dec. 93, p3630-3648.

Effective stress

Fracture Mechanics and Plasticity in Saturated Clay, Adel S. Saada, Liqun Liang and Gary F. Bianchini, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p21-39.

Procedures for Elastoplastic Liquefaction Modeling of Sands, A. Anandarajah, EM July 94, p1563-1587. Response Prediction of Granular Materials at Low Effective Stresses, Emir J. Macari-Pasqualino, Kenneth

Runesson and Stein Sture, GT July 94, p1252-1268.

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Efficiency

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Development of Functional Characteristics of Vehicle Mounted Plastic Scintillation System, John G. Follette, Jeffrey J. Tappen and Christopher T. Briggs, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1964-1970.

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The Efficiency of Source Terms in Performance Assessments for Salt Repositories, Dieter Buhmann, Jürgen Brenner and Richard Storck, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p501-507.

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Planning and Management of Change, Robert M. Nelson, Jr., C. Thomas Statton and Robin K. St. Clair, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1722-

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Pressure-Time Flow Rate in Low Head Hydro Plants, Charles W. Almquist, David B. Hansen, Gerald A. Schohl and Patrick A. March, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p445-453.

Real-World Reading (ltr), CE May 94, p32.

Recent Advances In Well Hydraulics, Otto J. Helweg and S. Sunita, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p608-611.

Reclamation and Water Conservation, Craig R. Phillips, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p573-576.

Refinement of Cross-Flow Turbine Design Parameters, Hara G. S. Totapally and Nadim M. Aziz, EY Dec. 94,

p133-147.

Reoperation of Existing Reservoirs to Serve Changing Needs: Observations on Institutional Inertia, Conflict, and Efficiency, Douglas P. Gillingham, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p565-568.

The Total System Approach to Efficient Pipeline Design, Randal W. Stuart, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p159-

Value Engineering Software, ET Apr./May 94, p11.

Visual Investigation of Field Bed-Load Sampling, Moustafa T. K. Gaweesh, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p233-241.

Work Planning: Getting it Right the Second Time, CE Jan.

94, p11-12.

Assessment of BNR Systems in Florida, Richard O. Mines, Jr. and C. William Woods, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p436-443.

Clarifier Enhancements Yield Excellent Performance, Cindy L. Wallis-Lage and David B. Hunt, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p194-201.

Critical Concepts for Column Testing, Charles D. Shackelford, GT Oct. 94, p1804-1828.

East River Modeling of Water Quality for Multiple-Project Assessments, Guy Apicella, Robert Norris, Johanna Newton, Walter Ewald and Angelika Forndran, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p235-248.

Hydraulic Age Distribution in Perfectly Mixed Non-Steady-State Reactors, Marcelo Juanico and Eran

Friedler, EE Nov./Dec. 94, p1427-1445.

Initial Dilution of Southeast Florida Ocean Outfalls, John R. Proni, Hening Huang and William P. Dammann, HY Dec. 94, p1409-1425.

Measurement and Automatic Control of Chlorination. Robert Hill and James Martin, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p718-725.

Mechanism of Biological Treatment in Plug-Flow or Batch Systems, Hasan Ali San, EE July/Aug. 92, p614-628.

Model of an Upgrade, Bruce Gall and Alan A. Smith, CE July 94, p60-62.

Modeling Initial Mixing of Ocean Wastewater Discharges to Develop Toxic Effluent Limitations, Christopher C. Obropta and Scott T. Taylor, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1047-1054.

Modeling of Deep Water Outfall Plumes in the East Australian Coastal Ocean, Ian P. King, William L. Peirson and Bruce A. Cathers, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p71-85.

NCASI Experiment Related to Validation of Equilibrium Partitioning (EP) Theory, Steven W. Hinton, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p737-742.

A Nearshore Model for Cleveland CSO Remediation Design Selection, David P. Podber, Chieh-Cheng J. Yen, Lou Regenmorter, Keith W. Bedford and Onyx W. H. Wai, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p222-226.

Optimization Studies of Anaerobic Expanded Bed Reactor Pretreatment of Domestic Wastewater, Thomas L. Theis, Bruce J. Alderman and Anthony G. Collins, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p289-296. ORP Measurement in Anaerobic Systems Using Flow-Through Cell, Munish Gupta, Ashutosh Gupta, Makram T. Suidan, Gregory D. Sayles and Joseph R. V. Flora, EE Nov./Dec. 94, p1639-1645.

Performance Evaluation of Constructed Wetland Treatment System, L. B. Sumrall, R. Y. Surampalli, S. K. Banerji and D. M. Sievers, CR June 94, p35-46.

Egypt
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Free-Vibration Analysis of Point-Supported Orthotropic Plates, D. J. Gorman, EM Jan. 94, p58-74.

Peak Load Determination in Linear Fictitious Crack Model, Yuan N. Li and Robert Y. Liang, EM Feb. 94, p232-249.

Spherical Domes Subjected to Horizontal Earthquakes, Haruo Kunieda, Shigehiro Morooka and Koji Onodera, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p229-238.

Three-Dimensional Behaviour of a Multiple Bar System,

Ihree-Dimensional Behaviour of a Multiple Bar System, Kathelijne M. Wijnberg and Felix C. J. Wolf, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p59-73.Vibration Characteristics of Suspension Membrane Structures, Norio Masaoka, Kazuo Ishii and Ryo Muranaka, (Spatial, Lattice and Tension Structures, John F. Abel, North Marchael, ed., 2016. ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p732-741.

Eigenvectors

Bridge Condition Rating Using Fuzzy Sets and an Eigenvector of Priority Settings, Hani G. Melhem and Senaka Aturaliya, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1908-1915.

Diaphragm Height of Ejector of Uniform Sediment, Nan-dana Vittal and G. A. Shivcharan Rao, HY Mar. 94, p398-405.

Elastic analysis

Advanced Nonlinear Formulation for Reinforced Concrete Beam-Columns, B. A. Izzuddin, C. G. Karayannis and A. S. Elnashai, ST Oct. 94, p2913-2934.

Application of Adaptive Analysis to Reinforced Concrete Frames, C. G. Karayannis, B. A. Izzuddin and A. S. El-nashai, ST Oct. 94, p2935-2957.

Beam-Buckling Analysis via Automated Rayleigh-Ritz Method, C. M. Wang, L. Wang and K. K. Ang, ST Jan. 94, p200-211.

Comparison of Simple and Chebychev Polynomials in Rayleigh-Ritz Analysis, Sarvesh Singhvi and Rakesh K. Kapania, EM Oct. 94, p2126-2135.

Elastic deformation

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Elastic foundations

Amplified Microbending in Coated Optical Fibres, John Roorda, EM Apr. 94, p917-921.

Large Deformation Analysis of Plates on Unilateral Elastic Foundation, A. A. Khathlan, EM Aug. 94, p1820-1827. Laterally Loaded Piles in Elastic Media, Keming Sun, GT Aug. 94, p1324-1344.

Rectangular Thick Plate with Free Edges on Pasternak Foundation, X. P. Shi, S. A. Tan and T. F. Fwa, EM May 94, p971-988.

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Wave Attenuation in Elastic Continuum with Attenuating Neighborhood, Songtao Xue, Jun Tobita and Masanori Izumi, EM Mar. 94, p419-430.

Elastic moduli

Computer Modelling of Comminuting Granular Media, H. Alehossein and H.-B. Mühlhaus, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p660-667.

Elastic Constants for Z-Core Sandwich Panels, Tat-Ching Fung, Kang-Hai Tan and Tat-Seng Lok, ST Oct. 94, p3046-3055.

Re-Repair of the Piedras Bridge in El Paso, Texas with a New Low Pressure Spray Applied Structural Repair Mortar System, Robert J. Gulyas and Robert Navarro. (Infrastructure: New Materials and Methods of Repair. Kim D. Basham, ed., 1994), p936-954.

Wave Propagation in Ice-Covered Channels, Steven F. Daly, HY Aug. 93, p895-910.

Elastic properties

Thin-Walled Curved Beams. I: Formulation of Nonlinear Equations, Young J. Kang and Chai H. Yoo, EM Oct. 94, p2072-2101.

Thin-Walled Curved Beams. II: Analytical Solutions for Buckling of Arches, Young J. Kang and Chai H. Yoo, EM Oct. 94, p2102-2125.

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Parameters Affecting Distortional Buckling of Tapered Steel Members, Hamid Reza Ronagh and Mark Andrew Bradford, ST Nov. 94, p3137-3155.

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Large Deflection of Beams under Moment Gradient, S. Chucheepsakul, S. Buncharoen and C. M. Wang, EM Sept. 94, p1848-1860.

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Dynamic Green's Functions of Homogeneous Poroelastic Half-Plane, T. Senjuntichai and R. K. N. D. Rajapakse, EM Nov. 94, p2381-2404.

Dynamics of Elastic Cable Under Parametric and External Resonances, Y. Cai and S. S. Chen, EM Aug. 94, p1786-1802.

Dynamics of Laminated Plates with Layer Waviness, Raouf A. Raouf, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p109-115.

Optimal Shakedown Design of Circular Plates, F. Giambanco, L. Palizzolo and C. Polizzotto, EM Dec. 94, p2535-2555

Prediction of Settlement of Spread Footings, Luciano Décourt, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p210-213.

Scaling Laws in Mechanics of Failure, Zdeněk P. Bažant, EM Sept. 93, p1828-1844.

A Self-Balancing Laminate, Jozsef Bodig, Robert T. Brooks and Allan G. Burk, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p689-

Shear Modulus of Kaolin Containing Methane Bubbles, S. M. Duffy, S. J. Wheeler and J. D. Bennell, GT May 94, p781-796

Stability of Skew Mindlin Plates under Isotropic In-Plane Pressure, C. M. Wang, S. Kitipornchai, Y. Xiang and K. M. Liew, EM Feb. 93, p393-401.

Stresses Induced by Surficial and Deep Loading in Elastic Medium, Olivier Rossa and Gabriel Auvinet, GT Aug. 92, p1241-1246.

Elastoplasticity

Analysis of Port Allen Lock in Elastic-Plastic Soil Medium, Hsi Chi Yang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p865-872. Classification of Semi-Rigid Connections Based on the Elastic-Plastic Mechanical Behavior of Frames, Yoshiaki Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1191-1196.

Finite-Element Analysis of Elastoplastic Discontinuities, Paul Steinmann and Kaspar Willam, EM Nov. 94,

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Formulation of MIT-E3 Constitutive Model for Overcon-solidated Clays, Andrew J. Whittle and Michael J. Kav-vadas, GT Jan. 94, p173-198.

Fracture Mechanics and Plasticity in Saturated Clay, Adel S. Saada, Liqun Liang and Gary F. Bianchini, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p21-39. Hollow Spheres Subjected to Sustained and Variable Loads, Wei Jiang, EM June 94, p1343-1368.

Material Model for Concrete in Cracked and Uncracked States, R. Meyer, H. Ahrens and H. Duddeck, EM Sept.

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Material Nonlinear Analysis of Thin-Walled Beams, A. Prokić, ST Oct. 94, p2840-2852.

Nonlinear Geometric and Material Behavior of Shell Structures with Large Strains, S. A. Schimmels and A. N.

Palazotto, EM Feb. 94, p320-345.

Patazouto, EM Feb. 34, p.20-343.
Predictions of Footing Tests Sponsored by the FHWA
Using a Strain Hardening Elastoplastic Constitutive
Model, I. Shahrour and M. Zaher, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994),

Settlement Prediction of Spread Footing Based on Labora-tory Test Results, Mohammed S. A. Siddiquee, Tadatsugu Tanaka and Fumio Tatsuoka, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed.,

1994), p137-140.

Electric power demand

A Comparison of Propulsion Systems for Space Exploration, Ryan D. Hoover, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p751-755. Emission-Cost Trade-offs and Rate Feedback for Electric

Utilities, Benjamin F. Hobbs, EY Dec. 94, p103-121.

Planning for Power Outages, ET June/July 94, p10. Propulsion Systems: Present and Future, John Paul Strachan, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p769-773.

Roles of the Lunar-Solar Power System In Development of the Resources of Greater Earth for Mankind, David R. Criswell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p638-647.

Solar Power Satellites, Sean Russell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p793-798.

A Summary of the NEPSTP Nuclear Safety Program, Al-Summary of the NEPSTF ruction and Togram, Ambert C. Marshall and G. Kompanietz, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p708-716.

TOPAZ II System Description, Susan S. Voss, (Engineering, Construction, and Operations in Space IV, Rodney Galloway, ed. and Stanley Lokaj, ed., 1994), p717-

Electric power plants

Emission-Cost Trade-offs and Rate Feedback for Electric Utilities, Benjamin F. Hobbs, EY Dec. 94, p103-121.

Failure of the Turkey Point Unit 1 Reinforced Concrete Chimney During Hurricane Andrew, W. F. Brannen, T. D. Joseph, Randolph W. Snook and Robert A. Porthouse, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p405-414.

Impact of Hurricane Andrew on Electrical Generating Fainpact of Humane Andrew on Electrical Generating Pa-cilities, W. F. Brannen, R. L. Adams and J. E. Sheetz, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad So-

tani, ed., 1994), p397-404.

A Practical Application of Concession Schemes to Space Energy Projects, Michel Lyonnet du Moutier, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p658-

What Do SO₂ Emissions Cost? Allowance Prices and Externality Adders, Benjamin F. Hobbs, EY Dec. 94, p122-132.

Electric power transmission

Effects of Hurricanes Andrew and Iniki on Lifelines, Masoud M. Zadeh, Tom Larsen, Charles Scawthorn, Craig Van Anne and Tom K. Chan, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p223-232.

Overview - Electrical Substation Structures Design Guide, Leon Kempner, Jr., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p597-600.

Role of Vortex-Excited Vibrations in Damage to Power Poles in Hurricane Andrew, Richard A. Skop and Ahmad H. Namini, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p567-576.

Utility Pole Can Be Installed By Hand or Helicopter, CE

May 94, p94.

Electrical conductivity

Characterization of Cement-Aggregate Interfaces by Elec-trical Conductivity Methods, Xie Ping and J. J. Beaudoin, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p15-25.

Ground-Penetrating Radar For Salt-Affected Soil Assess-ment, Sun F. Shih and Don L. Myhre, IR Mar./Apr. 94,

p322-333.

Measuring Air Concentration in Flowing Air-Water Mix-tures, Boualem Hadjerioua, Tony A. Rizk, Emmett M. Laursen and Margaret S. Petersen, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p289-295.

Electrical equipment

Thermal Stresses in Piezoelectric Materials: A Boundary Integral Formulation, J. S. Lee and L. Z. Jiang, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p336-347.

Waste Generation and Minimization in Semiconductor Industry, David G. Gilles and Raymond C. Loehr, EE Jan./Feb. 94, p72-86.

Electrical resistivity

Electrical Properties of Topopah Spring Tuff as a Function of Saturation, Jeffery J. Roberts and Wunan Lin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2112-

Electrical-Resistivity Measurements for Evaluating Compacted-Soil Liners, R. J. Kalinski and W. E. Kelly, GT Feb. 94, p451-457.

Electrification

Heavy Metal Removal from Soil by Coupled Electric-Hydraulic Gradient, Lutful I. Khan and M. Sahidul Alam, EE Nov./Dec. 94, p1524-1543.

Oxygen from Lunar Soil via Fluorination, Wolfgang Seboldt, Stephan Lingner, Stephan Hoernes and Wolfgang Grimmeisen, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1210-1219.

Electronic equipment

EDI and Its Role in Information Management, G. Edward Gibson, Jr., Lansford C. Bell and Clarisse Molad, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1798-1805.

Microworlds for Learning Through Inquiry, David McArthur, Matthew W. Lewis and Miriam Bishay, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1067-1074.

Removal of Bromate After Ozonation by Electron Beam Irradiation, M. Siddiqui, G. Amy, W. Cooper, C. Kuruz and T. Waite, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p654-661.

Shoals System Capabilities for Hydrographic Surveying, J. L. Irish, W. J. Lillycrop, L. E. Parson and M. W. Brooks, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p314-

Strengthening the Design/Construction Interface Using Electronic Imaging, Document Management and Work Flow Technologies, Jorge A. Vanegas, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p600-

Impact of System Chemistry on Electroosmosis in Contam-inated Soil, Gerald R. Eykholk and David E. Daniel, GT May 94, p797-815.

Elevated structures

Lateral-Load Analysis of Frame Stagings for Elevated Water Tanks, Sajjad U. Sameer and Sudhir K. Jain, ST May 94, p1375-1394.

Road to Recovery, Ray Zelinski, CE Apr. 94, p36-39.

Trapped in an Elevator during the World Trade Center Bombing: A Personal Account, Satinder P. S. Puri, CF Nov. 94, p217-228.

Embankment stability

Analysis of the Juturnaiba Embankment Dam Built on an Organic Soft Clay, Roberto Q. Coutinho, Márcio S. S. Almeida and Jose Bernardino Borges, (Vertical and Horizontal Deformations of Foundations and Embank-ments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p348-363.

Dynamic Compaction to Remediate Liquefiable Embank-ment Foundation Soils, Karl Dise, Michael G. Stevens and J. Lawrence Von Thun, (In-Situ Deep Soil Improve-ment, Kyle M. Rollins, ed., 1994), p1-25.

Geocell Mattress Effects on Embankment Settlements, Mark D. Evans, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p584-597.

Performance of Embankment Stabilized with Vertical Drains on Soft Clay, B. Indraratna, A. S. Balasubramaniam and P. Ratnayake, GT Feb. 94, p257-273.

Replacement of a Failed Embankment Designed to Accommodate Large Settlement: A Case Study, B. Kent Merritt and Gary M. Wantland, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p364-375.

Wanapum Dam Embankment Settlement Study, M. Gene Yow, Thomas R. Hollingsworth and David D. Moore, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p337-347.

Embankments

Arching in Piled Embankments, B. K. Low, S. K. Tang and V. Choa, GT Nov. 94, p1917-1938.

Comparison of Predicted and Measured Settlement of a Test Embankment Over Soft Soil, Kuo-Hsia Chang, William D. Kovacs and Ming-Jiun Wu, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1164-1175.

Dynamic Compaction of Landfill Beneath Embankment, Paul J. Lewis and James A. Langer, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994),

Effect of Orientation of Approach Slabs on Pavement Deformation, H. K. W. Wong and J. C. Small, TE July/Aug. 94, p590-602.

Liquefaction and Embankment Failure Case Histories, 1988 Armenia Earthquake, M. K. Yegian, V. G. Ghahraman and R. N. Harutiunyan, GT Mar. 94, p581-596.

Methods to Reduce the Settlement of Embankments on Soft Clay: A Review, Jean-Pierre Magnan, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p77-91.

Note on Bearing Capacity of Soft Clays under Embank-ments, H. S. Yu and S. W. Sloan, GT Jan. 94, p246-255.

Performance of Embankment Stabilized with Vertical Drains on Soft Clay, B. Indraratna, A. S. Balasubramaniam and P. Ratnayake, GT Feb. 94, p257-273.

Permanent Deformation on Preexisting Sliding Surfaces in Dams, George Gazetas and Nasim Uddin, GT Nov. 94, p2041-2061.

Rate of Settlement of Silt Alluvium at Trojan, Derek H. Cornforth, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1460-1471.

Review of Wetting-Induced Collapse in Compacted Soil, Evert C. Lawton, Richard J. Fragaszy and Mark D. Hetherington, GT Sept. 92, p1376-1394.

Settlement Measurements of 50-ft High Embankments at the Chesapeake & Delaware Canal Bridge, Ed Brylawski, Poh C. Chua and Edward S. O'Malley, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1149-1163.

Settlement of Embankments on Soft Clays, Gholamreza Mesri, Dominic O. Kwan Lo and Tao-Wei Feng, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio,

ed., 1994), p8-56.

Settlement of Peats and Organic Soils, Tuncer B. Edil and Evert J. den Haan, (Vertical and Horizontal Deforma-tions of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1543-1572.

Settlements of Highway Embankments on Soft Lacustrine Deposits, Loren R. Anderson, Casan L. Sampaco, Syed H. Gilani, Edward Keane and Loren Rausher, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p376-397.

The Significance of Hydrodynamic Forces in Coastal Embankment Design, Bang-Fuh Chen, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p880-889.

Simplified Soil-Nailing System Ready to Stanch Steep Embankments, ET Oct./Nov. 94, p8.

Simulating Effects of Highway Embankments on Estuarine Circulation, Jonathan K. Lee, Raymond W. Schaffranek and Robert A. Baltzer, WW Mar./Apr. 94, p199-218.

Stability of Shale Embankments, Tien H. Wu, Brian W. Randolph and Chiung-Shiann Huang, GT Jan. 93, p127-146.

Stress-Deformation Behavior of an Embankment on Boston Blue Clay, Charles C. Ladd, Andrew J. Whittle and Dante E. Legaspi, Jr., (Vertical and Horizontal Deforma tions of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1730-1759.

Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994, 0-7844-0027-X, 1940pp.

Embayments

Pollution Susceptibility of Well-Mixed Tidal Basins, Joseph L. DiLorenzo, Rhomaios V. Ram, Poshu Huang and Tavit O. Najarian, WW July/Aug. 94, p404-422.

Analysis of Embedded Foundations by Substructure-Deletion Method, R. Betti and A. M. Abdel-Ghaffar, EM June 94, p1283-1303.

Cone Models for Embedded Foundation, Jethro W. Meek and John P. Wolf, GT Jan. 94, p60-80.

Emergency services

Cultivating Stakeholder Interaction in Emergency Manage-ment, Wallace J. Weaver and Loretta F. Brownell, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p188-192.

Emergency Response Preparedness Analysis for Radioactive Materials Transportation, Emelinda M. Parentela, Shashi K. Sathisan, Sandeep S. Burli and Walter C. Vodrazka, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1249-1254.

Marketing for Emergencies, ME Jan./Feb. 94, p11.

The Nevada Statewide Radioactive Materials Transportation Plan, Maria Ardila-Coulson, (High Level Radioactive Waste Management, High Level Radioactive Waste

tive Waste Management, Fign Level Kautoschev Hand Program Committee, 1994), p150-157. An Overview of the Federal Response to Hurricane Iniki, Frank R. Finch, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed.

and Mehrdad Sotani, ed., 1994), p294-299.

San Diego County Water Authority's Emergency Storage Project Supplying Water During Natural Disasters, Uli Kappus, Ken Steele and Dick Westmore, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p885-888.

Breakout Session 1: Coping with Conformity, Lucy Ed-mundson, Sonia Hamel, Abbe Marner and Michael Re-plogle, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), pl 39.

Breakout Session 2B: Transportation SIP Requirements, Mark Howard, Craig Leiner, Phil Lorang and John Suhrbier, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p142-144.

Breakout Session 3A: Interfacing with Emission Models, Greig Harvey, Ron Kirby, Keith Lawton, Michael Replogle and Leonard Seitz, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p147-150. Breakout Session 4B: Speed and Vehicle Mix, Arun Chat-

terjee, Lawrence Tittemore and Roy Turner, (*Transportation Planning and Air Quality II*, Thomas F. Wholly, ed., 1994), p153.

Breakout Session 4C: Public Participation, Brian Ketchum, Marilyn Skolnick and Kathleen Stein Hudson, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p154.

Breakout Session 5A: Emissions Modeling, Alan Goldman, Terry Miller and Guido Schattanek, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed.,

1994), p155.

Breakout Session 5C: Regional Modeling, Jon Anderson, Richard Burkhart and Gus von Bodungen, (Transporta-tion Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p158-160.

Breakout Session 6C: Alternative Fuels, Ovi Colavincenzo, Gerald Esper and Peter Hagerty, (Transportation Plan-ning and Air Quality II, Thomas F. Wholly, ed., 1994),

California Airports: Ground Access Vehicle Trips, Emissions and Emission Reduction Strategies, Thomas J. Higgins, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p102-126.

Clearing the Air About Sludge Incinerator Emissions, Phil-lip M. Martin, Eugene W. Waltz and Richard D. Kuchenrither, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p122-128

Developing Air-Emission Curbs, ET Dec. 94/Jan. 95, p10. Emission Impacts of Intelligent Vehicle Highway Systems, Simon Washington, Randall Guensler and Daniel Sperling, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p118-138.

Evaluating ATIS Impacts on Air Quality, H. Al-Deek, R. Wayson and A. E. Radwan, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p95-

Evaluating the Effects of Transportation Control Measures, William R. Loudon and Deborah A. Dagang, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p19-43.

Incineration Emissions Monitor Offers Air-Compliance Proof, ET Aug./Sept. 94, p7.

Off-Gas Recycle for VOC Emission Control: Conceptual Model, Yerachmiel Argaman and Jack L. Musterman, EE May/June 94, p573-587.

The Role of Transportation Control Measures in Reducing Air Pollution: MPO Views, Andrew J. Reser, David T. Hartgen and Walter E. Martin, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p44-

Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994, 0-87262-914-7, 237pp.

Emission standards

Incineratior Emissions Monitor Offers Air-Compliance Proof, ET Aug./Sept. 94, p7.

Breakout Session 5A: Emissions Modeling, Alan Goldman, Terry Miller and Guido Schattanek, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p155.

Breakout Session 5B: Microscale Modeling, Paul Benson, Don DiCristofaro, Richard Schoeneberg and John Zamurs, (Transportation Planning and Air Quality II,

Thomas F. Wholly, ed., 1994), p156-157.

California Airports: Ground Access Vehicle Trips, Emissions and Emission Reduction Strategies, Thomas J. Higgins, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p102-126. Control of Odor and VOC Emissions at Wastewater Treat-

Control of Odor and VOC Emissions at Wastewater Treat-ment Plants -Boston Harbor Case Study-, Robert Getter, Cheryl Breen and Mark Laquidara, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed. 1994), 5748-575. Data Needs for Evolving Motor Vehicle Emission Model-

ing Approaches, Randall Guensler, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed.,

1994), p167-196.

Diesel May Clean Coal-Powered Plants, ET Oct./Nov. 94, p10-11.

Dual-Sorbent Injection: Good and Bad News, ET Oct./ Nov. 94, p10.

Emission-Cost Trade-offs and Rate Feedback for Electric Utilities, Benjamin F. Hobbs, EY Dec. 94, p103-121.

Emissions, Ambient Concentrations, and Potential Health Hazards of VOCs from Wastewater Treatment, Jin-Sheng Lin and Lynn M. Hildemann, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p580-584.

New Methodology for Modeling Annual-Aircraft Emis-sions at Airports, B. Gordon Woodmansey and Judith G.

Patterson, TE May/June 94, p339-357.

Stack Emissions Monitor May Offer Compliance Proof, CE Dec. 94, p17. Systems-Level Evaluation of Automated Urban Freeways,

Robert A. Johnston and Raju Ceerla, TE Nov./Dec. 94,

What Do SO₂ Emissions Cost? Allowance Prices and Externality Adders, Benjamin F. Hobbs, EY Dec. 94, p122-132.

Empirical equations

Data Analysis of Bed Concentration of Suspended Sediment, Julio A. Zyserman and Jørgen Fredsøe, HY Sept. 94, p1021-1042

Empirical Mohr-Coulomb Failure Criterion for Concrete Block-Mortar Joints, M. Ayubur Rahman and Subhash

C. Anand, ST Aug. 94, p2408-2422.

Equilibrium Beach Profiles on the Catalan Coast, J. P. Sierra, A. Lo Presti and A. Sánchez-Arcilla, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p432-445.

Employee benefits
ASCE 1993 Salary Survey, ASCE Committee on Employment Conditions of the Professional Practice Division, EI Apr. 94, p221-230.

ASCE Guide to Employment Conditions for Civil Engineers, revised edition (M&R No. 55), Committee on Employment Conditions, (D. Wayne Klotz, chmn.), 1994, 0-7844-0057-1, 30pp.

ASCE Salary Survey 1993, Committee on Employment Conditions of the Professional Practice Division of the American Society of Civil Engineers, (D. Wayne Klotz, chmn.), 1994, 0-87262-893-0, 66pp.

Packaging Benefits Packages, Michael W. Creed, Christie C. Allen and C. Janet Whitney, ME Jan./Feb. 94, p19-22.

Employee relations

After the Layoff, ME Sept./Oct. 94, p15.

ASCE Guide to Employment Conditions for Civil Engineers, revised edition (M&R No. 55), Committee on Employment Conditions, (D. Wayne Klotz, chmn.), 1994, 0-7844-0057-1, 30pp.

Obser Leads ASCE Staff in Years of Service Marked during 1993, NE May 94, p2.

Save That Employee Rather Than Fire, Anne Glad, ME July/Aug. 94, p16-18.

Employees

Action-Response Model and Loss of Productivity in Construction, David W. Halligan, Laura A. Demsetz, James D. Brown and Clark B. Pace, CO Mar. 94, p47-64. Empowered Teams Dominate U.S. Business, ME Mar./Apr.

94, p2.

Leading Creative People as Consulting Engineering Be-comes Globalized, Brian J. Lewis, ME Mar./Apr. 94, p39-43.

Save That Employee Rather Than Fire, Anne Glad, ME July/Aug. 94, p16-18.

Sending College Hires on a Two-Year Mission, ME July/ Aug. 94, p12.

Training for Effective Public Outreach: A Model for Transportation Risk Communication Training, Judith Holm, Kathie Reed and Dick Tardif, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p83-87.

Employment

After the Layoff, ME Sept./Oct. 94, p15.

Contract Awarded for Canadian Bridge, CE Jan. 94, p8. EEO, ADA and Hiring, Mark Disney, ME May/June 94, p18-21.

Go West, Says Salary Survey, CE May 94, p8.

Employment conditions

ASCE 1993 Salary Survey, ASCE Committee on Employ-ment Conditions of the Professional Practice Division, EI Apr. 94, p221-230.

ASCE Guide to Employment Conditions for Civil Engineers, revised edition (M&R No. 55), Committee on Employment Conditions, (D. Wayne Klotz, chmn.), 1994, 0-7844-0057-1, 30pp.

ASCE Salary Survey 1993, Committee on Employment Conditions of the Professional Practice Division of the American Society of Civil Engineers, (D. Wayne Klotz, chmn.), 1994, 0-87262-893-0, 66pp.

Employers Speak Out on Telecommuting, ME May/June 94, p2-3.

Empowered Teams Dominate U.S. Business, ME Mar./Apr. 94, p2.

Employment opportunities

Americans with Disabilities Act and Employment Practices in Construction, Stuart D. Anderson, Carolyn F. Morgan and Mukul Goel, EI Oct. 94, p360-378.

Civil Engineering Undergraduate Education in Japan: System Overview, Masanori Tsuji and Antonio Nanni, El Apr. 94, p135-144.

Infrastructure: a More Comprehensive Policy is Needed, Neil S. Grigg, EI Apr. 94, p183-192.

Job Searching Goes High-Tech as ASCE Endorses Job Bank, CE June 94, p76.

New Engineer Grads Find High Salaries and Steady Demand, CE July 94, p68.

Proactive Career Management, Glenn E. Schirmer, ME Jan./Feb. 94, p33-36.

Sending College Hires on a Two-Year Mission, ME July/ Aug. 94, p12.

Using Marketing Techniques in Your Job Search Can Yield Good Results, NE Feb. 94, p11.

Women Engineers: Why So Few? National Academy of Sciences, ME Sept./Oct. 94, p20-23.

Treatment of Oil in Water Emulsions by Ceramic-Supported Polymeric Membranes, Robert P. Castro, Yoram Cohen and Harold G. Monbouquette, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p82-89.

Analytical Model for Steel-Jacketed RC Circular Bridge Columns, Y.H. Chai, M. J. N. Priestley and F. Seible, ST Aug. 94, p2358-2376.

Endangered species

Design and Operation of a System to Monitor Sediment Deposition for Protection of an Endangered Mussel, Mi-chael S. Griffin and David S. Mueller, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p472-481.

Do Endangered Species Endanger Projects?, CE June 94,

Evolution of an Endangered Species Study-The Ouachita Madtom, Gregory M. Quartucci and Fred C. Pinkney, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p846-849

Instream Flow Strategies for Operation of the Federal Central Valley Project, Serge Birk, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed.

and Harry N. Tuvel, ed., 1994), p315-318.

Missouri River Least Tern and Piping Plover Model Development, R. Tressler, R. Fairbanks, D. Latka, J. Glassley, K. Engel and J. Rude, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p750-753.

Modeling Temperature Impacts on Salmon Survival, Jamie D. Anderson and Gerald T. Orlob, (Water Policy and Management: Solving the Problems, Darrell G. Fontane,

ed. and Harry N. Tuvel, ed., 1994), p323-326.

Pink Sandverbena Recovery Efforts, Eric P. Braun and Thomas Kaye, (*Dredging '94*, E. Clark McNair, Jr., ed.,

1994), p1441-1450.

Water Policy Change, Implications for Pyramid Lake, John W. Fordham, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p501-504.

Energy

Energy Analysis of High Temperature Lunar Manufactur-ing Processes, Belinda Wong-Swanson and Rocco Faz-zolari, (Engineering, Construction, and Operations in Space IV, Rodney G, Galloway, ed. and Stanley Lokaj, ed., 1994), p697-707.

Energy-Based Failure Criterion for Wood, Timothy A Philpot, Kenneth J. Fridley and David V. Rosowsky, MT

Nov. 94, p578-594.

Inter-stellar Propulsion: The Need for Speed, William R. Claycomb, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p737-746.

Momentum and Energy Coefficients Based on Power-Law Velocity Profile, Cheng-lung Chen, HY Nov. 92,

p1571-1584.

Remote Sensing of Astrofuel™, K. R. Harris, H. Y. Khater and G. L. Kulcinski, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p648-657.

Variational Theories in Hydrodynamics and Hydraulics, Chih Ted Yang, HY June 94, p737-756.

Energy absorption

Applications of Viscoelastic Dampers to High-Rise Buildings, C. S. Tsai and H. H. Lee, ST Apr. 93, p1222-1233. Ductility of Concrete-Filled Steel Box Columns under Cy

clic Loading, Tsutomu Usami and Hanbin Ge, ST July 94, p2021-2040.

Energy conservation

Demand-Side Solutions Can Save Energy, CE Aug. 94, p18.

Environmental Campus for EPA, Tod Rittenhouse, CE Oct.

94, p54-57. Headloss Analysis for Modern Piping Systems, L. Gregg Horn, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p10-27.

Energy consumption

Computer Based Energy Analysis for Mechanical Retrofit of Buildings, Joseph Staib, Matt Syal and David Peters, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1349-1356.

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Engineers and Managerial Challenges: A Transitional Perspective, M. Ali Porbahaie, CE June 94, p73-74.

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Ethical Responsibilities of Engineering Profession, Mark J. Holliday, El July 94, p270-272.

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94, p28. More than 20 Young Civil Engineers Share \$43,000 in ASCE Scholarships and Fellowships for 1994, NE Oct.

94, p8-9. Organizational Attitudes of Senior Professionals, George

Bennett and John Whittaker, ME May/June 94, p35-40. OSHA and the Design Professional, Arthur G. Sapper, CE

Apr. 94, p60-62. Protectionism Ultimately Destroys the Protected (ltr), CE

Dec. 94, p28-29. Qualification System for Building Engineers in Japan, Katsumi Yano, (Structures Congress XII, N. C. Baker,

ed. and Barry J. Loodno, ed., 1994), p211-214. Qualification System for Building Engineers in Korea, Li-Hyung Lee and Waon-Ho Yi, (Structures Congress XII), N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p215-220

Safety at the Site, Virginia Fairweather, CE Aug. 94, p50-

Setting A Place for Engineers (ltr), CE Dec. 94, p29.

Why Do Engineers Wear Black Hats? P. Aarne Vesilind, El Jan. 93, p1-7.

..excellent communication skills required" for Engineering Managers, Todd A. Shimoda, 1994, 0-7844-0047-4, 113pp.

Entrainment

Fish Entrainment and Strategies for Diversion, Andrew R. Blystra, Dennis J. McCauley and John E. Navarro, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p447-451.

Sediment Deposition and Entrapment in Vegetated Streambeds, Steven R. Abt, Warren P. Clary and Christopher I. Thornton, IR Nov./Dec. 94, p1098-1111.

Entrepreneurship

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Comparisons of Directional Wave Analysis Methods, Taer-im Kim, Lihwa Lin and Hsiang Wang, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p554-568.

Estimation of Directional Spectra by ML/ME-Methods, Ola Haug and Harald E. Krogstad, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p394-405.

Modeling of Maximum Velocity in Open-Channel Flow, Chao-Lin Chiu and Chairil A. Said, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p381-385.

Variational Theories in Hydrodynamics and Hydraulics, Chih Ted Yang, HY June 94, p737-756.

Envelope curves

Distributions of Envelope and Phase in Weakly Nonlinear Random Waves, M. Aziz Tayfun, EM May 94, p1009-1025

Environment

Environmental Collective Action: Residential Recycling Programs, Jess W. Everett, El Apr. 94, p158-176.

For Engineers, 2 Basic Primer on Sustainable Development, NE Apr. 94, p10.

Integrated Spacecraft Environments Model (ISEM), Ray Rantanen and Tim Gordon, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p609-617.

Mexican marriages, WP Spring 94, p2.

Military Robots Revamped for Environmental Duty, CE Dec. 94, p23.

Staffing and Projects Grow Slightly in 1993, CE June 94, p8.

Environmental compatibility

Computer-Based Advisors for Environmentally Conscious "Green" Product Design, Antonio Diaz-Calderon, Steven Fenves, James Garrett and Chris Hendrickson, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1497-1504.

Environmental Campus for EPA, Tod Rittenhouse, CE Oct. 94. p54-57.

Tahoe Walls Anchored Quickly and Cleanly, CE Jan. 94, p90.

Virginia's Largest Wetlands Surround Dulles Toll Road, CE June 94, p27.

Environmental effects

Agitation Dredging Environmental Study, Larry M. Stuber and Elizabeth A. Day, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p76-85.

Beneficial uses of dredged material principles and practice, T. Neville Burt and Michael P. Dearnaley, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p631-643.

The Dredging Research Program Technical Area 2 Material Properties Related to Navigation and Dredging, Don Banks, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1554-1561.

Durability of Composite Material Reinforcement, Michael J. Chajes, Dennis R. Mertz, Theodore A. Thomson, Jr. and Cory A. Farschman, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p598-605.

The Effect the Central Utah Project Will Have On Water Conservation in Utah, Douglas Gilmore, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p25-28.

Emission-Cost Trade-offs and Rate Feedback for Electric Utilities, Benjamin F. Hobbs, EY Dec. 94, p103-121.

Environmental Effects of Flooding at a USCG Base, Virginia L. Bretzke and Michael J. Donnelly, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p781-787.

Evolution of Beneficial Uses of Dredged Materials for Over 200 Million Cubic Yards of Dredged Material in Galveston Bay, Texas Part II - Framework & Approach, Mike Jansky, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p843-846.

Global Environmental Change: Geoengineering Technology, Lyle M. Jenkins, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p524-531.

Moisture and Suction in Sanitary Landfills in Semiarid Areas, G. E. Blight, J. M. Ball and J. J. Blight, EE Nov./

Dec. 92, p865-877.

Policy Issues Related to Replacement of Fish Screens at Glenn-Colusa Intake, Michael R. Stansbury, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p153-156.

Source Evaluation of Solid Waste in Building Construction, Rafael M. Gavilan and Leonhard E. Bernold, CO Sept. 94, p536-552.

What Do SO₂ Emissions Cost? Allowance Prices and Externality Adders, Benjamin F. Hobbs, EY Dec. 94, p122-132.

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Facilitating Sustainable Development: Is Our Approach Correct? Michael N. T. Cottell, El July 93, p220-224.

Future Concerns in Environmental Engineering Graduate Education, Richard G. Luthy, David A. Bella, James R. Hunt, James H. Johnson, Desmond F. Lawler, Charles R. O'Melia and Frederick G. Pohland, El Oct. 92, p361-380.

Getting Together for Sustainable Development, Nicholas Chryssafopoulos, WP Spring 94, p43-44.

Global Environmental Change: Geoengineering Technolo-Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p524-531.

Growing Pains for a Maturing Industry, ME Mar./Apr. 94, pl.

Hydraulic Model Readies River for 1996 Olympics, CE Mar. 94, p26.

Identifying Causes of Failure in Providing Geotechnical and Environmental Consulting Services, Douglas C. Moorhouse and Richard A. Millet, ME May/June 94,

The MOUSE Uncertainty Analysis System, Albert J. Klee, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p372-379.

New Applications and Practices for Beneficial Uses of Dredged Material, M. C. Landin, J. Fowler and H. H. Allen, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p526-536.

Outlook for Environmental Education in 21st Century, Berrin Tansel, EI Apr. 94, p129-134.

Start-ups, CE Jan. 94, p8. Start-ups, CE Feb. 94, p8. Superfund Decision Analysis in Presence of Uncertainty, Aaron A. Jennings, Neel Mehta and Sumeet Mohan, EE Sept./Oct. 94, p1132-1150.

Use of Database in Geo-environmental Engineering, Amin Rahman and Thomas J. Moynahan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1251-

Environmental factors

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Elevated Walkways Rise Above Impact on Environment, CE Aug. 94, p78.

Environmental Justice: Implications for Siting of Federal Radioactive Waste Management Facilities, J. Bennett Easterling and James S. Poles, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p63-67.

Estimating Past Precipitation and Temperature from Fossil Ostracodes, Alison Jean Smith and Richard M. Forester, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2545-2552.

Fatigue Strength of Weathered Rolled Beam Made of A588 Steel, Pedro Albrecht and Camille Shabshab, MT Aug. 94, p407-428.

Fundamental Considerations of Design and Durability in Composite Rehabilitation Schemes for Steel Girders with Web Distress, S. B. Shulley, X. Huang, V. M. Karbhari and J. W. Gillespie, Jr., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1187-1194

No-Dig Method Contains Rehab Costs, CE Nov. 94, p86.

Optimum Curvature for Simple Horizontal Curves, Prianka N. Seneviratne and M. Nazrul Islam, TE Sept./Oct. 94, p773-786.

The Personal is Not Professional (ltr), CE Feb. 94, p35.

Potential of Vertebrate Studies for Assessing Past Climate Variations, Stephanie D. Livingston, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p2562-2568.

A Salmon Population Model for Evaluating Alternative Flow Regimes, John M. Bartholow and Terry J. Waddle, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p877-880.

State of the Harbor May Be Improving, CE Nov. 94, p8. Taking Environmental Tech to Market, ET Oct./Nov. 94,

p11.

Technical Guidelines for Dredged Material, Norman R. Francingues, Jr. and Michael R. Palermo, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p616-625.

To Microtunnel or Not to Microtunnel? The Construction of the Crown Point Trunk Sewer, Karen Larson Henry and Dave Zoumaras, (Hydraulics of Pipelines, Deon T Fowles, ed. and Douglas H. Wegener, ed., 1994), p73-

Tree-Rings and Climate: Implications for Great Basin Pale-oenvironmental Studies, Donald A. Graybill, M. R. Rose and Fred L. Nials, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2569-2573.

Value Landscape Engineering, Frederick S. Liljegren, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p424-433.

A Workable Compromise on Flood Control, CE Sept. 94,

World Bank Update: In Deep Water, Francois M.I. Lampietti, WP Special issue 94, p26-30.

Environmental impact statements

Analysis of Missouri River System Operations Alternatives, Roy McAllister, Lawrence Cieslik, Tom Cannon and Lon Hachmeister, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p814-817.

Five Year Implementation Retrospective on the Puget Sound Dredged Disposal Analysis Program (PSDDA), David Kendall, David Fox, Stephanie Stirling, Maria Peeler, Gene Revelas, Phillip Hertzog, Justine Barton and John Malek, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1527-1553.

An Information Engineering Approach for Environmental Impact Assessment and Monitoring Program, Chun-Hou Orr and Shu-Fang Peng, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p249-256.

Missouri River Master Manual Review and Update, Lawrence J. Cieslik and Roy F. McAllister, Jr., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p673-676.

NEPA Implementation: The Department of Energy's Program to Manage Spent Nuclear Fuel, Dillard B. Shipler, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1532-1537.

Water Resources Development in the 1990's: A New Procses, Peter D. Binney, Lawrence H. Roth and Daniel D. Heagerty, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p822-825.

Environmental impacts

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Analysis of Missouri River System Operations Alternatives, Roy McAllister, Lawrence Cieslik, Tom Cannon and Lon Hachmeister, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p814-817.

Applying a Problem-Solving and Consensus Building Ap-proach to Transportation Infrastructure and Environmental Protection, Eugene W. Cleckley, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p226-228.

Assessing Effects for Disposal Sites off San Francisco, Peter Hamilton and Allan Y. Ota, (Estuarine and Coast-al Modeling III, Malcolm L. Spaulding, ed., Keith Bed-ford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and

Craig Swanson, ed., 1994), p14-28.

Assessing the Impact of Channel Deepening in Delaware Bay Through Numerical Modeling, K. W. Kim, B. H. Johnson and J. Gebert, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p29-41.

Balancing Recreational, Economic Development and Environmental Protection Goals for New Recreational Boating Facilities in the State of Wisconsin, U.S.A. Fred Klancnik, James Rooney and Larry Freidig, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p7-19.

The Canadian Cement Industry: A Partner in Environmental Improvement, Eric G. Fines, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep

L. Sarkar, ed., 1994), p406-423.

Cement Plant CKD Recovery System, S. M. Cohen and M. E. Prokesch, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p612.

Clean Water is not Enough, James R. Karr, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p79-95. Clinton Administration's Investment Budget for FY1995,

CE Apr. 94, p128.

Conceptualization of Boat Access Development Zones, David G. White, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p605-614.

Consider Economy and the Environment (ltr), CE May 94, p38.

Debris Removal Operations Following Hurricane Andrew, Rex M. Holmlin, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p539-547.

Development of a Long-Term Dredged Material Management Plan Chincoteague, Virginia, Tom B. Langley, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p359Development of Environmental Impacts Model for Missouri River System, Robert Loveless and Ray Walton, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

Development of Fisheries Models for the Missouri River System, Mark Harberg, Doug Latka, Tom Cole, John Nestler and Gene Ploskey, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and

Harry N. Tuvel, ed., 1994), p742-745.

Dioxin Contamination in Sediments of the Port of New York and New Jersey: The Search for Criteria, John F. Tavolaro and Joseph Olha, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p150-159.

DOE's Dreyfus Seeks More Funds for Storing Hazardous Waste as Deadline Nears, NE June 94, p1,4.

Dredging Impacts on Delaware Estuary Tides, Joseph L. DiLorenzo, Poshu Huang, M. Llewellyn Thatcher and Tavit O. Najarian, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p86-104.

Environment-Friendly Deicing/Anti-Icing Fluid, Len Haslim and John Zuk, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994),

p137-139.

Environmental Mediation and Open-Water Disposal, Joseph D. Germano, (*Dredging '94*, E. Clark McNair, Jr., 1904), p.160-163.

ed., 1994), p160-169.

Environmentally Compatible Marinas the Major Issues that Need to be Addressed in Designing New and Retrofitting Existing Marinas, Daniel S. Natchez, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p49-58.

Evaluating the Use of Waste Materials in Hot Mix Asphalt, Dale S. Decker, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1042-

Farakka Barrage - It's Impacts and Possible Mitigation, M. Asafuddowlah and Sufian A. Khondker, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p120-124.

Formulation of the Interagency Coordination Team for the Houston-Galveston Navigation Channels, Texas Project, Dalton H. Krueger, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p378-383.

Framework and Status of the ASCE Parks & Recreation Planning Guide, Marshall Flug, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p187-195.

A Framework for the Environmental Risk Assessment of Contaminated Sediments, Tom M. Dillon, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p141-149.

Galveston Bay 3D Model Study, Channel Deepening, Circulation, and Salinity Results, R. Berger, W. Martin, R. McAdory and J. Schmidt, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p1-13.

Impacts of Low Flows on the Alluvial Rivers of the Southwest Region of Bangladesh, Daryl B. Simons, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p125-129.

Impacts of Natural and Manmade Changes on the San Luis Rey River Environment, Chenchayya T. Bathala and W. Jeffery Moncrief, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p327-330.

Impacts of Repository Thermal Loading on System Cost, L. D. Rickertsen and W. W. Matyskiela, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p586-591.

An Improved Design of Fishways Under High Variation of Headwater, Kuo-Cheng Hsieh, Sue-Jen Wu and Cheyuan Huang, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p457-

Integrated Environmental Monitoring Dredging Projects in the Netherlands, Thomas Arts and Andre Kok, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1370-1379.

Kissimmee River Restoration Study, Hsieh Wen Shen, Guillermo Tabios, III and James A. Harder, WR May/ June 94, p330-349.

Laws and Regulations Regarding Wetland Mitigation and Mitigation Banking, John D. Rogner, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p333-341.

Long-Term Simulation of Decreased Acid Loading on For-ested Watershed, Todd H. Rees and Jerald L. Schnoor,

EE Mar./Apr. 94, p291-312

Maintenance Dredging in the River Scheldt, an Environmental Approach, J. Smits, L. Meyvis and F. Wens, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p499-

Management of San Diego Bay Dredged Material Dispos-al, Dan Muslin, (*Dredging '94*, E. Clark McNair, Jr., ed.,

1994), p332-341.

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Managing Uncertainty in Environmental Remediation Project Planning, Guru N. Rao and Francois Grobler, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p208-215.

Miami International Airport Stormwater NPDES Plan, Armando I. Perez, Jonathan Z. Goldman, Michael F. Schmidt and Edward E. Clark, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p540-547.

Modeling of Deep Water Outfall Plumes in the East Australian Coastal Ocean, Ian P. King, William L. Peirson and Bruce A. Cathers, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p71-85.

New Methodology for Modeling Annual-Aircraft Emis-sions at Airports, B. Gordon Woodmansey and Judith G.

Patterson, TE May/June 94, p339-357.

K. Li, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p193-200. Public Participation in Enviornmental Issues in Taiwan, K.

Quest for the Perfect Cap, N. Richard Wing and Glendon W. Gee, CE Oct. 94, p38-41.

Reducing Discharges from San Francisco to the Bay, James J. Jordan and Sangeeta Goyal, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p842-845.

and Harly N. Tuvel, ed., 1994, 19642-643.

Regional Wastewater Reuse in the Nueces Estuary, Kelly D. Payne and Samuel K. Vaugh, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p774-777.

Relevant Engineering in 21st Century, Henry J. Hatch, El July 93, p216-219.

Risk Management in Wellhead Protection, David A. Chin and Prasad V. K. Chittaluru, WR May/June 94, p294-315

SCREENER - An Expert System tool for Environmental Impacts Evaluation and Mitigation, P. Nathan Daniel, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1355-1359.

Sensitivity of Radiological Impacts of a Waste Disposal System to Radionuclide Sorption in the Geosphere, T. W. Melnyk, J. McMurry and F. P. Sargent, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1222-1228.

Simulating Hourly Hydropower Operations for the Assessment of Environmental and Economic Impact, David A. Harpman, A. Spreck Rosekrans and Ronald E. Moulton, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p553-556.

The Stump - A New Dimension in Dredging, George W. Batchelder, (*Dredging '94*, E. Clark McNair, Jr., ed.,

1994), p701-707. Surprises Uncovered at Jet-Crash Sites, CE Mar. 94, p24. TBP Revisited: A Ten Year Perspective on a Screening Fest for Dredged Sediment Bioaccumulation Potential, Victor A. McFarland and Paul W. Ferguson, (*Dredging* '94, E. Clark McNair, Jr., ed., 1994), p718-727.

Thermo-Hydrodynamic Modelling of the Chicago Sanitary and Ship Canal, Ejaz Mohammad and Forrest M. Holly, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1306-1310.

This Project's for You, CE Apr. 94, p8.

Turbidity and Contaminant Release During Dredging of Contaminated Sediments, Ronald W. van Oostrum and Peter Vroege, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p.210-219.

U.S. Firm to Engineer Coal-Plant Retrofit in 'Black Triangle', CE Mar. 94, p14,18.

Wastewater is No Waste if It's Reused, CE Dec. 94, p14.

Water Injection Dredging in the United States, David Knox, Daniel J. Krumholz and James E. Clausner, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p847-

A Wetland Mitigation Bank - An Economic Model, Douglas L. Lashley, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p352-359.

Wetland Mitigation Banks -- A Win-Win Situation, Robert D. Sokolove and P. Robert Thompson, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p342-351.

Wetlands Return to Former Mining Site, CE Oct. 94, p25.

Airports and Air Quality Issues - the European Perspective, David W. Raper, Roger L. Wayson, William Bowlby and James W. S. Longhurst, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p193-210.

Applying Dredged Material to Recreation Area Development, Russell K. Tillman and Thomas R. Patin, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p271-282.

Balancing Environmental Issues when Developing the Marina Project Scope, Jon Guerry Taylor, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p69-76.

Balancing Recreational, Economic Development and Environmental Protection Goals for New Recreational Boating Facilities in the State of Wisconsin, U.S.A. Fred Rianciik, James Rooney and Larry Freidig, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p7-19.

The Bladensbug Marina Revitalization Project, Wesley R. Johnson and Kevin H. Deis, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A.

Klancnik, ed., 1994), p439-448.

Breakwater Design and Construction Harbor Centre Marina Sheboygan, Wisconsin, Tom Holtan, Dave Anglin, Dave Sanders and Larry Ryan, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p292-299.

The Canadian Cement Industry: A Partner in Environmenand Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p406-423.

Congress Tackles Thorny Superfund Issue, CE July 94, p98.

Cooperative Ground-Water Resources Management: Local Perspective, Amleto A. Pucci, Jr., WR Nov./Dec. 94, p984-991.

Demonstration of the Wes New York Bight Hydrodynamic Model in Long Island Sound, S. Rao Vemulakonda and Norman W. Scheffner, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p309-322.

Differentiating the Experience of Boater "Publics", Ellen B. Drogin, Andrew Holdnak, Alan R. Graefe and James M. Falk, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994),

Don't Confuse Holistic Engineering With Political Correctness (ltr), CE Mar. 94, p32.

Dual Purpose Pipeline in the 1900s Environment, Randall C. Hill and Javier Saunders, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p119-128.

Education and Research in Water and Environment: Collaboration Between Minority and Majority Institutions, Neil S. Grigg, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuv-

el, ed., 1994), p81-84. Environmental Effects of Flooding at a USCG Base, Virginia L. Bretzke and Michael J. Donnelly, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p781-787. Environmental Issues and Management of Concrete Waste

in Japan, Yoichi Nojiri, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p424-437.

Environmental Modeling of Coastal Wetlands, Lisa C.
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in Cement and Concrete, Michael W. Crutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p524-561. Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994, 0-7844-0028-8, 620pp. Modeling Circulation and Salinity Transport in the Indian River Lagoon, M. Z. Moustafa and J. M. Hamrick, (Estu-arine and Coastal Modeling III, Malcolm L. Spaulding, ed. Keith Bedford ed. Alan Blumberg, ed. Ralph ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p381-395. Modular Evolution, Steven M. Shaker and Jeffrey H.

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ronmental Pendulum Now? Howard Holme, ed., 1994, 0-7844-0045-8, 275pp.

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Demonstration of Equipment for Dredging Contaminated emonstration of Equipment for Dreaging Contaminates Sediments at Buffalo River, Buffalo, New York, B. Thomas Kenna, Daniel E. Averett, Paul A. Zappi and Stephen M. Yaksich, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p885-895.

Demonstration of Pneuma Dredging Technology, Giovanni Faldi and Timothy L. Gahring, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1047-1049.

Design and Operation of a System to Monitor Sediment Deposition for Protection of an Endangered Mussel, Mi-chael S. Griffin and David S. Mueller, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p472-481.

Developments in Dredges during the last decade, Ruud Ouwerkerk and Hans Greve, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p690-700.

Dredging Equipment, Methods and Contracts, Gregory E. Breerwood, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p509-515.

The Dredging Research Program Technical Area 3, William D. Martin, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p11-17.

Dynamic Modeling of Slab Formwork during Concrete Placement, Saeed Karshenas and Stephen M. Heinrich, ST July 94, p2199-2217.

Equipment Management through Operational Failure Costs, Athanase I. Tsimberdonis and E. Lile Murphree, Jr., CO Sept. 94, p522-535.

Evolution of Cable Arm Clamshell Bucket, J-P. Pelletier, R. Santiago and J. Lajeunesse, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1050-1060.

A Method for Rock Dredging Performance Forecasting, Jorge E. Abramian and R. Bruce Taylor, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p229-238.

Monitoring of Water Injection Dredging, Dredging Pollut-ed Sediment, W. G. Borst, Joh. G. S. Pennekamp, H. Goossens, A. Mullié, P. Verpalen, T. Arts, P. F. van Dreumel and W. D. Rokosch, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p896-905.

On the Snow-Plough Effect when Cutting Water Saturated Sand with Inclined Straight Blades, S. A. Miedema, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p865-

One Mans View of Dredging Equipment 2020, Gerald E. Greener, (Dredging '94, E. Clark McNair, Jr., ed., 1994),

Placement Techniques for Capping Contaminated Sediments, Michael R. Palermo, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1111-1121.

Safety Assessment of a Chemical Reactor Vessel, A. Wiedermann, A. Longinow and F. Calabrese, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1-6.

A Sea Turtle Deflecting Hopper Dredge Draghead, Michael P. Alexander and Glynn E. Banks, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p857-864.

Simulation Verifies Queuing Program for Selecting Loader-Truck Fleets, Foad Farid and Thomas L. Koning, CO June 94, p386-404.

The Stump - A New Dimension in Dredging, George W. Batchelder, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p701-707.

System Analysis of Non-fuel Assemble Hardware and Spent Fuel Disassembly Hardware: Its Generation and Recommended Disposal, Douglas A. Williamson and James S. Tulenko, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1553-1561.

Tonnes Dry Solids Reviewed, Robert C. Rullens, Kees d'Angremond and Gerard Ottevanger, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p673-682.

An Update on Dredge Instrumentation and Automation, Arie Korevaar, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p764-775.

Water Injection Dredging in the United States, David Knox, Daniel J. Krumholz and James E. Clausner, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p847-

The Welland River Dredging Demonstration, Philip Miles and Donald Marr, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1061-1070.

Equipment costs

Comparing Dredging Costs Across Projects, Gerald E. Greener and Greg Hartman, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1325-1334.

Equipment Management through Operational Failure Costs, Athanase I. Tsimberdonis and E. Lile Murphree, Jr., CO Sept. 94, p522-535.

Monitoring Performance Indicators on Leased Hydraulic Cutterhead Dredges, William R. Chapman, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1315-1324.

Equivalence

Equivalent Diameter of Vertical Drains With an Oblon Cross Section, Richard P. Long and Alvaro Covo, GT Sept. 94, p1625-1630.

Estimating Ground Snow Loads Using Local Climatological Data, Kenneth J. Fridley, Kathy A. Roberts and J. Bryan Mitchell, ST Dec. 94, p3567-3576.

Erosion

Assessment and Recommendations for the Enhancement of the Bardawil Lagoon Outlets, Alfy M. Fanos, Ahmed A. Khafayg, Mohamed N. Anwar and Mary G. Naffaa, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p189-

Bender Park Development Milwaukee County, Wisconsin, Rob Montgomery, Barry Murray and Paul Hathaway, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p460-469.

Benefits of Hazard Mitigation Planning to Reduce Shore-line Impacts Due to Great Lakes Water Level Management Fluctuations and Severe Storms, Robert Nairn and Darryl Hatheway, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

Boundary Conditions and Flow Patterns in a Mountain River, Andrew J. Miller, Diane M. L. Mas, James A. Smith and Wei-Hao Chung, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p762-766.

Bridge Pier Scour with Debris Accumulation, Bruce W. Melville and D. M. Dongol, HY Sept. 92, p1306-1310.

Bridge Scour During the 1993 Floods in the Upper Mississippi River Basin, Gordon G. Barksdale, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p21-25.

Brief Summary of National Bridge Scour Data Base, Mark N. Landers, J. Sterling Jones and Roy E. Trent, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p41-45.

Design and Operation of a System to Monitor Sediment Deposition for Protection of an Endangered Mussel, Mi-chael S. Griffin and David S. Mueller, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p472-481.

Does Reentrainment Occur During Cohesive Sediment Settling? Y. L. Lau and B. G. Krishnappan, HY Feb. 94, p236-244.

Erosion and Deposition by Debris Flows in Mountainous Channels on North Fork Mountain, Eastern West Virginia, Daniel A. Cenderelli and J. Steven Kite, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p772-776.

Erosion Hazards and Coastal Construction Deficiencies rosson razards and Coastat Construction Deficiencies Observed on Kauai After Hurricane Iniki, A. Todd Davison, Charles E. Bornman and Melvin Nishihara, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p736-745.

Evaluation of Runoff and Erosion Models, Tien H. Wu, James A. Hall and James V. Bonta, IR Mar./Apr. 93, p364-382.

Field and Prototype Measurements for Numerical Coastal Modelling, Hans-H. Dette, Jürgen Newe and Yongjun Wu, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p129-

Hydrodynamics of Mining Pits in Erodible Bed under Steady Flow, Mohammad Akram Gill, HY Nov. 94, p1337-1348

Influence of a Sand Layer on Headcut Advance, Kerry M. Robinson and Gregory J. Hanson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p431-435.

Instability of Sandbars in Grand Canyon, Muniram Budhu and Roger Gobin, HY Aug. 94, p919-933.

Lacey Divergence Equations for Alluvial-Canal Design, S. V. Chitale, HY Nov. 94, p1320-1326.

A New Basic Principle for a New Series of Hydraulic Measurements. Erosion by Abrasion, Corrosion, Cavita-tion and Sediment Concentration, Lucien Chincholle, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p301-310.

On the Erodibility of Rock and Other Earth Materials, George W. Annandale and Hendrik A. D. Kirsten, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p68-72.

Potential for Seepage Erosion of Landslide Dam, William Meyer, R. L. Schuster and M. A. Sabol, GT July 94, p1211-1229.

Practical Method for Calculating Contraction Scour, E. V. Richardson and J. R. Richardson, (Hydraulic Engineer-ing '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p6-10.

Practical Method for Scour Prediction at Bridge Piers, J. R. Richardson and E. V. Richardson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer,

ed., 1994), p1-5.

Prediction of Sediment Yield, U. C. Kothyari, A. K. Tiwari and Ranvir Singh, IR Nov/Dec. 94, p1122-1131.

Protecting a Pipeline, Manuel Garcia-Lopez and Donald H. Gray, CE Dec. 94, p44-47. Protection Against Scour at SAF Stilling Basins, Charles E.

Rice and Kem C. Kadavy, HY Jan. 93, p133-139. Riprap Criteria below Pipe Outlet, Mahmood Shafai-Bajestan and Maurice L. Albertson, HY Feb. 93, p181-

200. Routing Debris Flows with Particle Segregation, Tamotsu Takahashi, Hajime Nakagawa, Tatsuo Harada and Yousuke Yamashiki, HY Nov. 92, p1490-1507.

Selection of Gravel-Transport Formula for Stream Modeling, Howard H. Chang, HY May 94, p646-651.

A Study on Mathematical Model for Sediment Yield in Mountain Regions with Large Hillside Slopes, Duo Fang and Guoliang Yu, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p752-756.

The Transport of Gravels in Boulder-Bed Streams, Alan F. Barta, Peter R. Wilcock and Conor C. C. Shea, (Hydrau-

Barta, Peter N. wincock and Control Co. Sika, Grandalic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p780-784.
Uncertainty and Time Preference in Shore Protection, Kevin O'Grady and Leonard Shabman, (Risk-Based Dev. 1997). cision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv,

ed., 1994), p136-154.

Erosion control

Beach Nourishment in Presence of Seawall, Robert G. Dean and Chul-Hee Yoo, WW May/June 94, p302-316. Dredged Material Used in Sand-filled Containers for Scour Bredged Materiat Osed in Sand-Inted Containers for Scott and Erosion Control, Lee E. Harris, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p537-546.

Environmental Restoration and Enhancement using

Dredged Material in Chesapeake Bay, Maryland, S. D. Garbarino, R. N. Blama, M. C. Landin, S. R. Maynord and T. R. Patin, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p384-393. Fiber Matrix Bonds Soil to Charred Hills, CE June 94, p91.

Gully Erosion Minimization on Reclaimed Surface Mines Using SSAST Computer Model, Rose A. McKenney and Thomas W. Gardner, IR Sept./Oct. 94, p910-924. Poplar Island Reclamation and Beneficial Uses of Dredged

Material, Edward T. Fulford, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1406-1415.

Pot-Nets, Delaware, Wetland Habitat and Beneficial Uses of Dredged Material Project, Edward T. Fulford and Robert E. Tunnell, Jr., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1451-1460.

Protecting a Pipeline, Manuel Garcia-Lopez and Donald H.

Gray, ČE Dec. 94, p44-47. Runoff Detention for Flood Volume or Erosion Control, A. Osman Akan and Edward N. Antoun, IR Jan./Feb. 94, p168-178.

Error analysis

Equivalent Linearization for Seismic Responses. I: Formulation and Error Analysis, Young J. Park, EM Nov. 92, p2207-2226.

Error Evaluation of Three Random-Field Generators, Gordon A. Fenton, EM Dec. 94, p2478-2497

Hot-Film Response in Three-Dimensional Highly Turbulent Flows, P. Prinos, (Fundamentals and Advancements Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p176-184.

Human Error Models for Structural Reliability, Eric P. Steinberg, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p199-204.

Modeling of GPS Systematic Errors in Monitoring and Control Surveys, Adam Chrzanowski and Yong-qi Chen, SU Nov. 94, p145-155.

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Story-Drift, Shear, and OTM Estimation from Building Seismic Records, S. T. Mau and V. Aruna, ST Nov. 94, p3366-3385.

Error functions

Non-steady-Flow Type Curves for Strip Aquifers with Constant Drawdown, Halil Onder, IR July/Aug. 94,

Errors

Bridge Fabrication Error Solution: Developing a Knowledge-Based Expert System for a State Department of Transportation, W. M. Kim Roddis and Michael R. Hess, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1687-1694.

Correct Form of Hall Technique for Border Irrigation Advance, A. Al-Azba and T. Strelkoff, IR Mar./Apr. 94,

p292-307 Correcting Conversions (ltr), CE May 94, p35.

Cover Photo, CE June 94, p38.

Equivalent Differential Equations in Fixed-Grid Characteristics Method, Mohamed S. Ghidaoui and Bryan W. Karney, HY Oct. 94, p1159-1175

Face to Face, WP Special issue 94, p5.

Humanware, Human Error, and Hiyari-Hat: A Template of Unsafe Symptoms, Shigeomi Nishigaki, Jeannette Vav-rin, Noriaki Kano, Toshiro Haga, John C. Kunz and Kincho Law, CO June 94, p421-442

A Matter of Feet (ltr), CE Nov. 94, p31.

Tallest Guyed Tower? Two are Taller (ltr), CE June 94, p40.

Esthetics

Aesthetic Considerations in the Design of a Stack Extension, Howard I. Epstein and George Torello, Jr., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1238-1243

Aesthetic Issues in Timber Bridges, Frederick M. Law, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1268-1273.

Bridging the Gap Between Architecture and Engineering, Thomas L. Harrison, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1256-1261.

Anatomy of Best Estimate, Leo R. Beard, HY June 94, p679-692.

Dynamic Properties of Gravel Layers Investigated by In-Situ Freezing Sampling, Takeji Kokusho and Yukihisa Tanaka, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994),

Hurricane Windspeeds at Inland Locations, P. J. Vickery and L. A. Twisdale, (Structures Congress XII, N. C.

Baker, ed. and Barry J. Loodno, ed., 1994), p473-478.

Impact of Non-Gaussian pdf on Reliability Estimates for Deep Water Platforms, John M. Niedzwecki, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p1463-1465.

Late Holocene Climate Derived From Vegetation History and Plant Cellulose Stable Isotope Records From the Great Basin of Western North America, Peter E. Wigand, Martha L. Hemphill and Sikha (Manna) Patra, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2574-2583.

Low-Flow Frequency Analysis with Censored Data, Chuck Kroll and Jery Stedinger, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p786-789.

On the Erodibility of Rock and Other Earth Materials, George W. Annandale and Hendrik A. D. Kirsten, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p68-72.

Predicting Changes in Construction Cost Indexes Using Neural Networks, Trefor P. Williams, CO June 94,

Preliminary U-Series Disequilibrium and Thermoluminescence Ages of Surficial Deposits and Paleosols Associated with Quaternary Faults, Eastern Yucca Mountain, J. B. Paces, C. M. Menges, B. Wildmann, J. R. Wesling, C. A. Bush, K. Futa, H. T. Millard, P. B. Maat and J. W. Whitney, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2391-2401.

Spatial Distribution of Potential Near Surface Moisture Flux at Yucca Mountain, Alan L. Flint and Lorraine E. Flint, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2352-2358.

Statewide Consumptive Use Estimates, T. Teegarden, L. Pochop, G. Kerr and R. Delaney, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p485-488.

Threshold Precipitation Events and Groundwater Recharge, Richard H. French and Roger L. Jacobson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p298-302.

U-234/U-238 Ratio: Qualitative Estimate of Groundwater Flow in Rocky Flats Monitoring Wells, J. C. Laul, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2702-2708.

Willingness-to-Pay for Alternative Shortage Probability Distributions, Jay R. Lund, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p521-524.

Alternative Approach to Estimation of Critical Cornering Speed, John D. Leonard, II, TE May/June 94, p478-496.

Analogy-Based Solution to Markup Estimation Problem, Tarek Hegazy and Osama Moselhi, CP Jan. 94, p72-87.

Building Construction Detailed Estimating Practices in Saudi Arabia, Kamal M. Al-Harbi, David W. Johnston and Habib Fayadh, CO Dec. 94, p774-784.

Defining and Using Reference Evapotranspiration, George H. Hargreaves, IR Nov./Dec. 94, p1132-1139.

The Design of a Proactive Cost Feedback System for Construction Project Management, David N. Ford and Feniosky Pena, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1365-1372.

Estimating Annual Urban Nonpoint Pollutant Loads, Robert D. Chandler, ME Nov./Dec. 94, p50-59.

Estimating Autocovariance of In-Situ Soil Properties, Don J. DeGroot and Gregory B. Baecher, GT Jan. 93, p147-

Estimating Clay Liner and Cover Permeability Using Com-putational Neural Networks, Girish Agrawal, Saroj Weeraratne and Kris Khilnani, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p115-122.

Estimating Construction Productivity: Neural-Network-Based Approach, Li-Chung Chao and Miroslaw J. Skib-niewski, CP Apr. 94, p234-251.

Estimating Past Precipitation and Temperature from Fossil Ostracodes, Alison Jean Smith and Richard M. Forester, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

Estimating Toxicity of Organic Chemicals to Activated-Sludge Microorganisms, B. Sun, N. Nirmalakhandan, E. Hall, X. H. Wang, J. Prakash and R. Maynes, EE Nov./ Dec. 94, p1459-1469.

Extensive Comparison of Directional Wave Analysis Methods From Gauge Array Data, Michel Benoit, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p740-754.

IPA Phase 2 and NRC's HLWM Regulatory Program, Norman A. Eisenberg, Rex G. Wescott, Margaret V. Federline, Mel Silberberg and Budhi Sagar, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1451-1460.

Scada System Requirements for Optimum Pumping, Vilas Nitivattanannon, Elaine C. Sadowski and Rafael G. Quimpo, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p110-114

A Watershed Model for Estimating Suspended Sediment Hydrographs, Hafez Q. Shaheen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1176-1180.

Estimation

Calibration of Poorly Identifiable Systems: Application to Activated Sludge Model, Marcos von Sperling, EE May/June 94, p625-644.

Comparison of Some Estimation Methods in Frequency Analysis, Zoubeida Kebaili-Bargaoui, HY Feb. 94, p228-235.

Compressive Strength of Masonry Prisms, Magdi A. Khalifa and Ahmed E. Magzoub, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1100-1105.

Confined Aquifer Parameters from a Pump Test Near an Impermeable Boundary, Stephen J. Burges, HY July 93,

The Determination of Typhoon Design Wave By Synthetic Probibility Method, Nai Kuang Liang and Hai Kuan Peng, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p1040-1047.

Electrical Properties of Topopah Spring Tuff as a Function of Saturation, Jeffery J. Roberts and Wunan Lin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2112-2120.

Element Identification of Member Properties of Framed Structures, Andres W. C. Oreta and Tada-aki Tanabe, ST July 94, p1961-1976.

Estimation of Design Surge Heights by Utilizing Meteoralogic and Oceanographic Data, Jahir Uddin Chowdhury and A. K. M. Tarcque, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p918-922.

Estimation of Directional Spectra by ML/ME-Methods, Ola Haug and Harald E. Krogstad, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p394-405.

Estimation of Mean Flow Velocity in Ice-Covered Channels, Martin J. Teal, Robert Ettema and John F. Walker, HY Dec. 94, p1385-1400.

Estimation of Settlements of Shallow Foundations, M. Surendra, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p153-156.

Estimation of Spread-Footing Settlement on a Sand Subgrade, John S. Horvath, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p145-148.

Estimation of Structural Damping of Buildings, Yukio Tamura, Masaaki Yamada and Haruhiko Yokota, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1012-1017.

Estimation of Wave Directional Spectra from Pitch-Roll Buoy Data, F. P. Brissette and I. K. Tsanis, WW Jan./Feb. 94, p93-115.

Evaluation of Six Methods for the LP3 Distribution, Fang Xin Yu and Babak Naghavi, (*Hydraulic Engineering* '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1080-1084. Evolutionary Fourier Analysis of Wave Data, Leon E. Borgman, Mihail Petrakos and Chao Li, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p708-725.

Extreme Winds Estimation by 'Peaks Over Threshold' and Epochal Methods, J. L. Gross, N. A. Heckert, J. A. Lechner and E. Simiu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1472-1477.

Floodflow Effects on Riparian Vegetation in Arizona, J. V. Phillips and H. W. Hjalmarson, (Hydraulic Engineering 194, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p707-711.

Heuristic Knowledge-base Approach to Runoff Estimation in Midwestern States Using a SCS Curve Number Method, Jaewan Yoon and G. Padmanabhan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p410-417

A Hybrid Algorithm for Radionuclide Estimation, E. A. Yfantis, G. T. Flatman and F. S. Makri, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2063-2068.

Intercomparison of Extremal Wave Analysis Methods Using Numerically Simulated Data, Yoshimi Goda, Peter Hawkes, Etienne Mansard, Maria Jesus Martin, Martin Mathiesen, Eric Pelier, Edward Thompson and Gerbrant van Vledder, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), 9963-977.

Modeling 3-D Ground Water Mounding, Tswn-Syau Tsay, John Hoopes, Salwa Rashad and Yahia Majali, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p317-321.

Modeling of Extreme Loading by 'Peaks Over Threshold' Methods, J. L. Gross, N. A. Heckert, J. A. Lechner and E. Simiu, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p135-147

A new approach for the estimation of extreme roughness in torrents by Hydraulic and Photogrammetry, Hanspeter Hodel, Thomas P. Kersten and Isidor Storchenegger, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p697-701.

Parameter Estimation in Water-Distribution Systems by Least Squares, R. S. N. Datta and K. Sridharan, WR July/Aug. 94, p405-422.

Parameter Estimation of Structures from Static Response. II: Numerical Simulation Studies, M. R. Banan, M. R. Banan and K. D. Hjelmstad, ST Nov. 94, p3259-3283.

Parameter Estimation of Structures from Static Response. I: Computational Aspects, M. R. Banan, M. R. Banan and K. D. Hjelmstad, ST Nov. 94, p3243-3258.

Potential of Vertebrate Studies for Assessing Past Climate Variations, Stephanie D. Livingston, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2562-2568.

Probable Maximum Flood Estimation for New and Existing Dams, Anand Prakash, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p361-365.

Resilient Modulus for Fine-Grained Subgrade Soils, Dingqing Li and Ernest T. Selig, GT June 94, p939-957. Simple Method for Identification of Border Infiltration and Roughness Characteristics, John D. Valiantzas, IR Mar.

Apr. 94, p233-249.
Ultimate Depth of Scour Around Bridge Piers, Sarfaraz A.
Ansari and Alimul Qadar, (Hydraulic Engineering '94,
George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

Estuaries

1994), p51-55.

Analyzing Larval Fish Distributions Using Hydrodynamic and Transport Modelling, John Eric Edinger, Edward M. Buchak and Michael D. McGurk, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p536-550.

Characterization of Circulation and Salinity Change in Galveston Bay, Keh-Han Wang, EM Mar. 94, p557-579.Circulation and Flushing in Casco Bay, Maine, Bin Gong and Bryan R. Pearce, (Computing in Civil Engineering, Khalii Khozeimeh, ed., 1994), p1039-1046. A Comparative Analysis of Estuarine Circulation Simulation Using Laterally Averaged and Vertically Averaged Hydrodynamic Models, C. Kirk Ziegler, Jerad D. Bales, Jeanne C. Robbins and Alan F. Blumberg, (Estuarine And Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p447-460.

DETMOD: A Desktop Estuarine Transport MODel, David G. Kleinschmidt and Bryan R. Pearce, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p1032-1038.

Differential Dynamic Programming for Estuarine Management, Guihua Li and Larry W. Mays, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p653-656.

Diffusion Hydrodynamic Model of Shallow Estuary, G. L. Guymon, M. N. Khan, M. Collins and T. V. Hromadka,

WR Mar./Apr. 94, p253-266.

- Dredging Impacts on Delaware Estuary Tides, Joseph L. DiLorenzo, Poshu Huang, M. Llewellyn Thatcher and Tavit O. Najarian, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p86-104.
- EPA's Environmental Monitoring and Assessment Pro-gram: Availability of Broad-Scale Environmental Data and Opportunities for Use in Environmental Modeling Applications, Richard W. Latimer, John F. Paul and Jeffrey S. Rosen, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p509-521.

Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994, 0-87262-

975-9, 696pp.

- A Field and Modeling Study of Residual Circulation in Sarasota Bay and Tampa Bay, Florida, Y. P. Sheng and S. J. Peene, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p641-655.
- Field Measurements in a Tidal River Estuary on the Canta-brian Coast, Spain, D. A. Huntley, M. A. Losada, R. Medina, C. Vidal and K. Stapleton, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p143-157.
- The Formation of a Turbidity Maximum in an Estuary, Kathryn Pickens, Zenitha Chroneer, Poorvi Patel and Wilbert Lick, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p187-201.

Freshwater-Inflow Need of Estuary Computed by Texas Estuarine MP Model, Junji Matsumoto, Gary Powell and David Brock, WR Sept./Oct. 94, p693-714.

Goal Programming Models for Determining Freshwater Inflows to Estuaries, Ning Mao and Larry W. Mays, WR

May/June 94, p316-329.

- Identification of A Field Data Collection Program in Delaware Bay, B. H. Johnson, K. W. Kim, T. L. Fagerberg and H. A. Benson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),
- An Interagency Overview of Selected Stream Sedimenta-tion Models, Shou-shan Fan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1166-1170.
- Linking Hydrodynamic and Biogeochemical Transport Models for Estuarine and Coastal Waters, J. M. Hamrick, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p591-
- Measurement of Turbulent Properties in a Natural System, Jörg Imberger and Roger Head, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p1-20.

Menomonee Valley Greenway Feasibility Study, Therese Gripentrog, Wink Hastings and Eduard J. Freer, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p1-6.

Mesh Generation for Estuarine Flow Modeling, Norman L. Jones and David R. Richards, WW Nov./Dec. 92, p599-

A Multi-Dimensional Transport Model Utilizing a Charac-teristic-Galerkin Approach, John F. DeGeorge and Ian P. King, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p407-421

Multiobjective Models for Determining Freshwater Inflows to Bays and Estuaries, Ning Mao, Lise LeBlanc, James Siebert, Wenchin Shi and Larry W. Mays, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p649-652.

New Methodology for Optimization of Freshwater Inflows to Estuaries, Yixing Bao and Larry W. Mays, WR Mar./

Apr. 94, p199-217.

Numerical Modeling of Fluid Mud Transport in Estuaries, Yan Yan and Earl J. Hayter, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p1070-1074.

Observations Related to the Use of the Sigma Coordinate Transformation for Estuarine and Coastal Modeling Studies, John F. Paul, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p336-350.

Optimization of Freshwater Inflows to Lavaca-Tres Palacios, Texas, Estuary, Yixing Bao and Larry W. Mays, WR Mar./Apr. 94, p218-236.

Prediction of Accretion Below Muhuri Closure Dam in Bangladesh, Mohammad Monowar Hossain and Mohammad Shahabuddin, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1141-1145.

Regional Optimization of Non-Point Source Load Reduction, J. Thomas Franques and Rhonda L. Townsend, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p262-266.

Regional Wastewater Reuse in the Nueces Estuary, Kelly D. Payne and Samuel K. Vaugh, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p774-777.

Salinity and Dissolved-Oxygen Dynamics in a Wind-Driven Estuary, Jerad D. Bales and R. G. Garrett, (Hy-draulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1311-1315.

Simulated Circulation and Transport in Adjacent Wind-Driven Estuaries in North Carolina, Jeanne C. Robbins and Jerad D. Bales, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p105-118.

Simulating Effects of Highway Embankments on Estuarine Circulation, Jonathan K. Lee, Raymond W. Schaffranek and Robert A. Baltzer, WW Mar./Apr. 94, p199-218.

- Small Scale Dynamic Structures and Their Sedimentation Effects in Estuarine Environment, Chaoyu Wu and Jiaxue Wu, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p158-174.
- Solutions of Primitive Equations for Three-dimensional Tidal Circulation, Vincenzo Casulli and Ralph T. Cheng, (Estuarine and Coastal Modeling III, Malcolm I Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p396-

ne Squintum Point Personnel Ferry and Metropolitan District Park, Quincy, Massachusetts, Patricia S. Loheed, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p370-376.

Stochastic Optimal Control for Determination of Freshwater Inflows to Estuaries, Bing Zhao and Larry W. Mays, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p645-648.

Three Dimensional Modelling of Estuarine Sediment Transport, A. Malcherek, C. LeNormant, E. Peltier, C. Transport, A. Malcherek, C. LeNormant, E. Petter, C. Teisson, M. Markofsky and W. Zielke, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p42-57

Verification of a Three-Dimensional Model of Delaware Bay, K. W. Kim, B. H. Johnson and J. Gebert, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p574-578.

Vortex Convection Produced by V-Shaped Dihedral Ob-struction, Takashi Asaeda, Pham Hong Son and Steven Armfield, HY Nov. 94, p1274-1291.

Constructivist Learning Model for Ethics Education, Richard H. McCuen, El July 94, p273-278.

District 9 Award Given for Paper on Ethics, CE Aug. 94, p66.

Ethical Responsibilities of Engineering Profession, Mark J. Holliday, El July 94, p270-272.

Ethics and Quality in the Constructed Project, Jerome S. B. Iffland, El Jan. 94, p8-24.

Integrating Ethics into Technical Curricula, Roger A. Killingsworth, Jr. and Darla J. Twale, El Jan. 94, p58-69. International Expansion, Ethics, and Prohibited Foreign

Trade Practices, A. L. Barco, ME Sept./Oct. 94, p34-40. Is It Necessary to Compromise Engineering Ethics to Remain Competitive in Today's Marketplace? D. Michael Mucha, CE May 94, p62-63.

Is it Necessary to Compromise Engineering Ethics to Remain Competitive? Jim V. Anderson, El Oct. 94, p379-

Is It Necessary to Compromise Engineering Ethics to Remain Competitive in Today's Marketplace? D. Michael Mucha, CE May 94, p62-63.

New Cop on the Block, WP Special issue 94, p2.

Relevant Engineering in 21st Century, Henry J. Hatch, El July 93, p216-219.

What to Do about Ethics?, NE Mar. 94, p6.

Why Do Engineers Wear Black Hats? P. Aarne Vesilind, El Jan. 93, p1-7.

Ethiopia

Water Balance of Blue Nile River Basin in Ethiopia, Peggy A. Johnson and P. Douglas Curtis, IR May/June 94, p573-590.

Europe

Airports and Air Quality Issues - the European Perspective, David W. Raper, Roger L. Wayson, William Bowlby and James W. S. Longhurst, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p193-210.

Constructed Civil Infrastructure Systems R&D: A Europe-an Perspective, CERF report #94-5010, Civil Engineer-ing Research Foundation, 1994, 0-7844-0001-6, 145pp.

First Findings From CERF's Task Force to Europe, CE Mar. 94, p77.

Rail-Air: A Multi-Modal Opportunity in a Changing World, Alastair Duff, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p150-158

Validation of the European Yield Model for Nailed Connections, Steve G. Winistorfer, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p923-928

Eutrophication

Coastal Eutrophication and Temperature Variation, Jacques Ganoulis, Stilianos Rafailidis, Istvan Bogardi, Lucien Duckstein and Istvan Matyasovszky, (Risk-Based Decision Making in Water Resources VI, Yacov Y, Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p317-330.

Evaluation and Management of Non-Point Source Pollu-tants in the Lake Tahoe Watershed, G. Fred Lee and Anne Jones-Lee, (Critical Issues in Water and Waste water Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p516-523.

Evacuation

Catastrophic Hurricanes May Become Frequent Events in Caribbean and Along the United States East and Gulf Coasts, Robert C. Sheets, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p37-51.

Overview of Hurricane Iniki, Arthur N. L. Chiu, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed.,

1994), p92-101.

Evaluation

Applications of Field Testing to Bridge Evaluation, Fred Moses, Jean Paul Lebet and Rolf Bez, ST June 94, p1745-1762.

Assessment: How to Make Lemons into Lemonade, John H. Page, El Jan. 94, p25-28.

CadVisor (CAD Equipment Analysis and Selection System), Bruce C. Goettel, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2140-2144.

Constructability Programs: Method for Assessment and Benchmarking, James T. O'Connor and Steven J. Miller.

CF Feb. 94, p46-64.

Evaluating the Steady State Stochastic Dynamic Programming Model for the High Aswan Dam, H. Abdelkader, J. Labadie and D. Fontane, (Water Policy and Manage-ment: Solving the Problems, Darrell G. Fontane, ed. and

Harry N. Tuvel, ed., 1994), p826-829.

Evaluation and Management of Non-Point Source Pollutants in the Lake Tahoe Watershed, G. Fred Lee and Anne Jones-Lee, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p516-523.

Evaluation Framework for IVHS, Hong K. Lo, Arun Chat-terjee, Frederick Wegmann, Stephen Richards and Ajay K. Rathi, TE May/June 94, p447-460.

Evaluation of Software for Analysis and Design of Reinforced Concrete Structures, Andrew D. Betaque and Kamal B. Rojiani, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p466-473.

Existing Sewer Evaluation and Rehabilitation, Second Edition, Second edition (M&R No. 62), Joint Task Force of the Water Environment Federation and the American Society of Civil Engineers, (B. Jay Schrock, chmn.), 1994, 0-7844-0049-0, 270pp.

An Eye for Toxics, ET June/July 94, p10.

Flat Plates with Regular and Irregular Column Layouts.II: Numerical Evaluations, Kolbjorn Saether, ST May 94, p1580-1598

For Design-Build, It's All in the Perception, CE June 94, p11-12.

Furrow Advance-Rate Solution for Stochastic Infiltration Properties, D. Renault and W. W. Wallender, IR May/ June 94, p617-633.

Habitat Configuration Evaluation Criteria for Moon/Mars, Kriss J. Kennedy, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p979-987.

Historic-Flood Evaluation and Research Needs in Mountainous Areas, Robert D. Jarrett, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p875-879.

Intelligent Design and Remediation of Shallow Landfill Burial Systems, James C. Ascough, II, Leonard J. Lane and Thomas E. Hakonson, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p257-264.

Kent, Edward, John Richardson and Vijay Panchang, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p56-60.

Policy Issues Related to Replacement of Fish Screens at Glenn-Colusa Intake, Michael R. Stansbury, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p153-156. Preliminary U-Series Disequilibrium and Thermolumines-cence Ages of Surficial Deposits and Paleosols Associat-

ed with Quaternary Faults, Eastern Yucca Mountain, J. B. Paces, C. M. Menges, B. Wildmann, J. R. Wesling, C. A. Bush, K. Futa, H. T. Millard, P. B. Maat and J. W. Whitney, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2391-2401.

Report Near on Condition of L.A. Metro Tunnel, CE Jan. 94, p22.

Review of Postconstruction Evaluation Procedures for Infrastructure Projects, Yuzo Akatsuka, ME Jan./Feb. 94,

Transportation Capstone Design Project: Review and Fu-ture Directions, John G. Schoon, El Jan. 94, p70-89.

Evaporation
Drain-Spacing Calculation Considering Influence of Evaporation Plans and Li Zhilu, IR

oration, Wang Wenyan, Shen Bing and Li Zhilu, IR May/June 94, p563-572. Evaporation and Evapotranspiration under Climate Change in New England, Neil M. Fennessey and Paul H. Kirshen, WR Jan./Feb. 94, p48-69.

Landfill Leachate Treatment by Evaporation, Deborah R. Birchler, Mark W. Milke, A. Leigh Marks and Richard G. Luthy, EE Sept./Oct. 94, p1109-1131.

Partitioning of Evapotranspiration Using Lysimeter and Micro Bowen-Ratio Systems, Hossein Ashktorab, W. O. Pruitt and K. T. Paw U, IR Mar./Apr. 94, p450-464.

Defining and Using Reference Evapotranspiration, George H. Hargreaves, IR Nov./Dec. 94, p1132-1139.

Dormancy and Nondormancy Alfalfa Yield and Evapo-transpiration, J. C. Guitjens and M. T. Goodrich, IR

transpiration, J. C. Guigens and M. I. Goodand, Nov/Dec. 94, p1140-1146.
Evaporation and Evapotranspiration under Climate Change in New England. Neil M. Fennessey and Paul H. Kirshen, WR Jan/Feb. 94, p48-69.

Evapotranspiration by Young Florida Flatwoods Citrus Trees, Brian J. Boman, IR Jan/Feb. 94, p80-88.

Irrigation Timing for Wheat Based on Climate, Crop, and Soil Data, R. P. Tripathi, IR May/June 92, p370-381.

Partitioning of Evapotranspiration Using Lysimeter and Micro Bowen-Ratio Systems, Hossein Ashktorab, W. O. Pruitt and K. T. Paw U, IR Mar./Apr. 94, p450-464.
Precision of Evapotranspiration Estimates Using Neutron

Probe, Osmar A. Carrijo and Richard H. Cuenca, IR

Nov./Dec. 92, p943-953.

Shallow Infiltration Processes in Arid Watersheds at Yucca Mountain, Nevada, Lorraine E. Flint, Alan L. Flint and Joseph A. Hevesi, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Com-

mittee, 1994), p2315-2322. Soil Water Model for Evaluating Water Delivery Flexibility, Sophie Lamacq and Wesley W. Wallender, IR July/

Aug. 94, p756-774

Verification of A 1-Dimensional Model for Predicting Shallow Infiltration at Yucca Mountain, Joseph A. Hevesi, Alan L. Flint and Lorraine E. Flint, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2323-2332.

Evolution, development

Bed-Form Development, Stephen E. Coleman and Bruce W. Melville, HY May 94, p544-560.

W. Melville, HY May 94, p344-300.
Conceptual Design Using Evolutive-Cognitive Computing Techniques, Donald E. Grierson, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2183-2190.

Constructability Related to TQM, Value Engineering, and Cost/Benefits, Jeffrey S. Russell, Kevin E. Swiggum, Jeffrey M. Shapiro and Achmad F. Alaydrus, CF Feb. 94, p31-45

Creative Design Using a Genetic Algorithm, Mary Lou Maher, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2014-2021.

The Evolution of Breakwater Design, Billy L. Edge, Orville T. Magoon and William F. Baird, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p1024-1039.

Road-Maintenance Planning Using Genetic Algorithms. I: Formulation, W. T. Chan, T. F. Fwa and C. Y. Tan, TE Sept./Oct. 94, p693-709.

Road-Maintenance Planning Using Genetic Algorithms. II: Analysis, T. F. Fwa, C. Y. Tan and W. T. Chan, TE Sept./Oct. 94, p710-722.

A Version and Configuration Scheme for Collaborative Engineering, Karthik Krishnamurthy and Kincho Law, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2022-2029.

Examination

An Alternative Formulation of Volume-change Behavior of Soils, Sunirmal Banerjee and Kandiah Sribalaskandarajah, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p652-662.

Assessment: How to Make Lemons into Lemonade, John H. Page, El Jan. 94, p25-28.

Computing in Analysis and Design in Structural Engineering Education, Practice and Registration: A View from the National Council of Examiners for Engineering and Surveying, J. Earl Herndon, Jr., (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p377-385.

Analysis of Deep Excavation in Boston, Andrew J. Whittle, Youssef M. A. Hashash and Robert V. Whitman, GT Jan.

Analysis of Glass-Ceramic Production from Lunar Resources, W. H. Poisl, B. D. Fabes, D. Allen, S. Hawley and A. Carpenter, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1278-1287.

Analysis of Port Allen Lock in Elastic-Plastic Soil Medium, Hsi Chi Yang, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p865-872.

Application of Heavy Duty Roadheaders for Underground Development of the Yucca Mountain Exploratory Study Facility, Jamal Rostami, Levent Ozdemir and David M. Neil, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p395-402.

The Challenge of Mining He-3 on the Lunar Surface: How All the Parts Fit Together, Igor N. Sviatoslavsky, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994),

p668-677.

Contracting for Tiedback Walls on a Design-Build Basis, Hubert J. Deaton, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p17-23.

Contractor Not Immune From Sub's Excavating, CE Apr. 94, p27

Control Model for Robotic Backhoe Excavation and Obstacle Handling, Xiaodong Huang and Leonhard E. Bernold, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p123-130.

Damage Evaluation of Building on Piers in Expansive Clay, Richard J. Finno, Gary J. Klein and Paul J. Sabatini, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1482-1493.

Deformations About Excavations in Highly Stressed Rock, Paul Nash and Garry Mostyn, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1447-1459.

Design & Construction of the Liberty Street Bridge Earth Support System, David R. Chapman, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p112-129.

Design, Construction and Performance of a Soil Nailed Wall in Puerto Rico, Suang S. Cheng and Lawrence A. Hansen, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p1-16.

Developing Plans for Robotic Excavators, Sanjiv Singh, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p88-96.

Development of a Mechanical Alcove Excavator for the Yucca Mountain Exploratory Study Facility, Erika Rönnkvist, James E. Friant and Levent Ozdemir, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p411-416.

Development of an Excavation Plan for Heavy Metal Contaminated Marsh Deposits, John J. Nocera and Thomas M. Simmons, (Dredging '94, E. Clark McNair, Jr., ed.,

1994), p1220-1229.

Excavation Damage and Organic Growth in a 1.2m Diameter Borehole, R. A. Everitt, D. A. Brown, D.M. Boychuk and P. Gann, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2092-2100.

Foundation Slab for Lunar Base Construction, Mikiya Okumura, Yasuhiro Ohashi, Takao Ueno, Shojiro Motoyui and Kiosuke Murakawa, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1128-1137.

Geogrids Help Solve Capitol's Gridlock, CE Dec. 94, p84. Ground Movements from Model Tieback Wall Construction, Christopher G. Mueller, James H. Long, Edward J. Cording and David E. Weatherby, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1337-1352.

High-Tech Excavation on President's List, CE Feb. 94, p8. Intelligent Excavator Control for a Lunar Mining System, Paul J. A. Lever, Fei-Yue Wang and Degian Chen, (Robotics for Challenging Environments, Laura A. Demsetz,

ed and Paul R. Klarer, ed., 1994), p97-105.

Microtunneling Techniques to Form an Insitu Barrier
Around Existing Structures, Philip J. Coller and David
G. Abbott, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p386-394.

Model Studies of Effects on Lunar Soil of Chemical Explosions, Chaun-Ping Lin, Deborah J. Goodings, Leonhard E. Bernold, Richard D. Dick and William L. Fourney,

GT Oct. 94, p1684-1703.

Navigation of an Autonomous Robot Vehicle, Arturo L. Rankin, David G. Armstrong, II and Carl D. Crane, III, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p44-51.

Novel, Low-Vibration Excavation Techniques for Underground Radioactive Waste Storage, Wilhelm J. Kogelmann, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p417-429.

On the Snow-Plough Effect when Cutting Water Saturated Sand with Inclined Straight Blades, S. A. Miedema, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p865-

An Overview of Shotcrete Usage on the SSC, Steven H. Baldauf, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p773-778.

Planning Intricate Robot Motions to Remove Natural Materials, Sudheer M. Apte and Irving J. Oppenheim, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p106-114.

Prediction of Ground Deformations Due to Excavation-Application to Tunnel Lining Design in Weak Rock, Wern-ping Chen, (Computing in Civil Engineering,

Khalil Khozeimeh, ed., 1994), p1997-2005.

Preparation of Bid Documents for Dredging/Excavating Contaminated Sediments, Soils and Marsh Deposits at the Marathon Battery Superfund Site Cold Spring, NY, Thomas M. Simmons, Gregory P. Matthews and Nick Multari, (Dredging '94, E. Clark McNair, Jr., ed., 1994), 21201 1208 p1201-1209. Self-Hardening Slurry Supports Shaft, CE Mar. 94, p92.

Simulation of Autonomous Robotic Excavation, Regis Hoffman and Reid Simmons, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer,

ed., 1994), p115-122.

Soil Mix Walls in Difficult Ground, David S. Yang and Shigeru Takeshima, (In-Situ Deep Soil Improvement,

Kyle M. Rollins, ed., 1994), p106-120.

Temporary Shoring Support Systems in an Urban Environment, John E. Reinfurt, Thomas C. Anderson, Paul Reitz and Tony Licari, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p24-42.

Tug Fork Flood Plain Modifications and Wetlands Mitiganom M. Aports, D.D. Deed, Lond C. Biling (Westerner)

tion, M. A. Ports, D. D. Dee, Jr. and C. Riling, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p766-769

A Tunnel Boring System for the Yucca Mountain Project, Steven N. Short, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p381-385.

Wando Terminal Ground Improvement Program, James Drew Hussin and Forrest Foshee, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1416-1425.

Excitation

Dynamic Behavior of Nonlinear Cable System. III, Dan M. Ghiocel and Dario A. Gasparini, EM Dec. 94, p2694-

Dynamics of Elastic Cable Under Parametric and External Resonances, Y. Cai and S. S. Chen, EM Aug. 94,

Fréquency Analysis in Stochastic Linearization, F. Casciati, L. Faravelli and P. Venini, EM Dec. 94, p2498-2518.

Ground-Motion Spatial Variation Effects on Circular Arch Responses, Hong Hao, EM Nov. 94, p2326-2341.

Reliability of Uncertain Nonlinear Trusses Under Random Excitation. II, R.-H. Cherng and Y. K. Wen, EM Apr. 94, p748-757.

Reliability of Uncertain Nonlinear Trusses Under Random Excitation. I, R.-H. Cherng and Y. K. Wen, EM Apr. 94,

Responses of Dynamic Systems Excited by Non-Gaussian Pulse Processes, Sau-Lon James Hu, EM Sept. 93, p1818-1827.

Semianalytical Method for Parametric Study of Tuned Mass Dampers, Y. L. Xu and K. C. S. Kwok, ST Mar. 94, p747-764.

Exoskeleton structures

Two States make First Use of Bridge-Deck Technology, CE Apr. 94, p10.

Bed-Level Variation in Channel Expansions with Movable Beds, P. K. Mohapatra and S. Murty Bhallamudi, IR Nov./Dec. 94, p1114-1121.

Biological Fluidized Beds Containing Widely Different Bioparticles, Kyoung S. Ro and Johannes B. Neethling, EE Nov./Dec. 94, p1416-1426.

Dulles International Airport Construction Challenges, Christopher P. Hinker, (Aviation Crossroads: Challeng es in a Changing World, William J. Sproule, ed., 1994),

Effect of Fly Ash and Silica Fume on Alkali Silica Reactions, Mette Geiker and Niels Thaulow, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p123-136.

Properties of Soundless Chemical Demolition Agents, Jimmie Hinze and James Brown, CO Dec. 94, p816-827.

Expansion joints Water Stop Aids Hudson Rehab, CE June 94, p91.

Expansive cement

The Use of Type K Expansive Cement Concrete for New Construction and Rehabilitation of Concrete Bridge Decks, Kenneth A. Herr and Robert T. Barclay, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p955-962.

Expansive clays

Damage Evaluation of Building on Piers in Expansive Clay, Richard J. Finno, Gary J. Klein and Paul J. Saba-tini, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1482-1493.

Influence of Horizontal Stresses on Gilgai Landforms, Britt Maxwell, GT Aug. 94, p1437-1444.

Prediction of Movement in Expansive Clays, Robert L. Lytton, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1827-1845.

Expansive soils

California Housing Damage Related to Expansive Soils, Richard L. Meehan and Lawrence B. Karp, CF May 94, p139-157.

Performance of Slab-on-Grade Foundations on Expansive Soil, Robert W. Day, CF May 94, p129-138.

Swell versus Saturation for Compacted Clay, Robert W.

Day, GT Aug. 92, p1272-1278.
Swelling of Black Cotton Soil Using Centrifuge Modeling, A. D. Gadre and V. S. Chandrasekaran, GT May 94, p914-919.

Experience

CAD's Creavity Can't Substitute for Experience (ltr), CE May 94, p32

Computer Analysis No Substitute for Experience, CE Feb. 94, pl.

The Computer is Not the Problem (ltr), CE May 94, p32-

Construction Expertise Transfer with Knowledge Based Systems, Hans Björnson and Bjarni P. Hjaroar, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p964-971.

Engineers: Follow Tedesko's Lead (ltr), CE May 94, p32. Failure as Source of Engineering Judgment: Case of John Roebling, Henry Petroski, CF Feb. 93, p46-58.

For Successful Design-Build, Onus is on the Owner (ltr), CE Aug. 94, p32-33.

Good Engineers Need Good Judgment (ltr), CE July 94, p30.

How We Falter and the Lessons We Learn, K. B. Khushalani, El Oct. 93, p422-426.

Lessons Learned from the Design, Construction and Operation of Hydroelectric Facilities, Task Committee on Lessons Learned from the Design, Construction and Op-

eration of Hydroelectric Facilities of the Hydropower Committee, Energy Division, ASCE, (Edward F. Carter, chmn.), 1994, 0-7844-0000-8, 105pp.

Experimental data

2DV Circulation-Pattern: Wave Decay and Undertow Modelling with Nearcir Code, F. Collado, A. Sánchez-Arcilla, M. G. Coussirat and J. Prieto, (*Coastal Dynamics '94*, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p556-570.

Applicability of Pseudo-force method to Highly Nonlinear Dynamic Problems, Satish Nagarajaiah and Andrei Reinhorn, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p165-172.

Behavior of RC Beams under Sustained Load, Nie Jianguo and Shen Jumin, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p239-244.

Bolted Connections for GFRP Laminated Structural Mem bers, Nahla K. Hassan, Charles N. Rosner and Sami H. Rizkalla, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1018-1025.

Bond Development of Thermoplastic FRP Shear Rein-forcement Stirrups, Justin Currier, Christian Fogstad, David Walrath and Charles Dolan, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p592-597

Comparison of a Wave Transformation Model with LIP-11D Data, Francisco J. Rivero, Agustín S.-Arcilla and Dénes Beyer, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p518-532.

Compression Strength of Pultruded FRP Materials, Ever J. Barbero and John Tomblin, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed.,

1994), p836-843.

Detailing Effects in Anchors for FRP Prestressing Tendons, Todd Stueve, Charles W. Dolan and David E. Walrath, (Infrastructure: New Materials and Methods of Repair,

Kim D. Basham, ed., 1994), p386-391.

Effect of Roughness and Thickness of Biofilms on External Mass Transfer Resistance, Tian C. Zhang, Paul L. Bishop and James T. Gibbs, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p593-600.

Energy Dissipation and Sediment Transport in Large Scale Tests, H. Rahlf and Y. Wu, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p742-754.

Experimental Study on the Strut Type of Cable Net Membrane Structures, Masao Saitoh, Akira Okada, Hiroaki Tabata and Toshio Mochizuki, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p573-582

Fracture Size Effect: Review of Evidence for Concrete Structures, Zdeněk P. Bažant, Joško Ožbolt and Rolf Eli-

gehausen, ST Aug. 94, p2377-2398.

Methods to Reduce the Settlement of Embankments on Soft Clay: A Review, Jean-Pierre Magnan, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p77-91.

Recent Advances in Biaxially Loaded Columns, ASCE-ACI Committee 441, Subcommittee on Biaxially Loaded Columns, (Hsu, C. T. T., chmn.), (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994),

Review of Works Using CRIEPI Flume and Present Work, Ryoichi Kajima and Tsutomu Sakakiyama, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p614-627.

Sediment Transport Measurements in Combined Wave-Current Flows, I. Katopodi, J. S. Ribberink, P. Ruol and C. Lodahl, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p837-851.

Seismic Design of RC Structural Walls with Unsymmetri-cal Cross-Sections, John W. Wallace and Sharon L. Wood, (Structures Congress XII, N. C. Baker, ed. and

Barry J. Loodno, ed., 1994), p43-48.

Study on Mechanical Characteristics of Light-weight Complex Structure Composed of a Membrane and a Beam String Structure, Masao Saitoh, Akira Okada, Katsuo Maejima and Tetsuo Gohda, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p632-641.

Study on the Sand Deposited Behind the Detached Breakwaters, Wen-Juinn Chen and Ching-Ton Kuo, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p938-949.

Vertical and Horizontal Deformations for Foundations on Sand: An Experimental Study, Christos N. Marangos, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p179-189.

Vibration Characteristics of Suspension Membrane Structures, Norio Masaoka, Kazuo Ishii and Ryo Muranaka, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p732-741.

Experimental design

The World's Longest Cable-stayed Foot-Bridge Using Fiber Reinforced Plastics, Magdi A. Khalifa and Maher K. Tadros, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p207-214.

Experimentation

Biofilm Sorption of Natural Organic Material, Gary Carlson and JoAnn Silverstein, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p460-466.

Clear-Water Scour around Abutments in Floodplains, Terry W. Sturm and Nazar Sadiq Janjua, HY Aug. 94,

p956-972

The DUCK94 Nearshore Field Experiment, William A. Birkemeier and Edward B. Thornton, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p815-821.

An Experiment in Mobile Robotic Cooperation, Lynne E. Parker, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p131-

Experimental Study of Debris Flows, Arbind Mainali and Nallamuthu Rajaratnam, HY Jan. 94, p104-123.

Experimental Study on Unsteady Flow in Open Channels with Flood Plains, A. Tominaga, M. Nagao and I. Nezu, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p396-405.

High-Strength Concrete Columns in High-Rise Buildings, Murat Saatcioglu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p37-42.

Hydration of Aluminate Cements, Pierre Barrett and Danielle Bertrandie, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p132-174.

Measurement and Prediction of Surface Shear Stress in An-nular Flume, D. I. Graham, P. W. James, T. E. R. Jones, J. M. Davies and E. A. Delo, HY Sept. 92, p1270-1286.

Migration of Conservative and Poorly Sorbing Tracers in Granite Fractures, Tjalle T. Vandergraaf, Chung-Kyun Park and Douglas J. Drew, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2251-2256.

Richard A. Behr and David S. Vollenweider, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p321-326.

Non-Intrusive Experimental Setup for Inflatable Dam Models, T. A. Economides and D. A. Walker, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p500-508.

Objectives of Proposed Large Scale Experimental Facility (ESTEX), T. M. Parchure, W. H. McAnally, Jr. and G. Nail, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p809-

On Measurements of Particle Spinning Motion, Hong Yuan Lee and In-Song Hsu, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p149-158. Performance Parameters for Pseudodynamic Tests, Chris

Thewalt and Mauricio Roman, ST Sept. 94, p2768-2781. Sensing and Control for Robotic Masonry, Rami A. Rihani and Leonhard E. Bernold, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer,

ed., 1994), p410-418.

Step-Pool Streams: An Adjustment to Maximum Flow Resistance, Athol D. Abrahams, Gang Li and Joseph F. Atkinson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p815-

Unsaturated Flow Experiment with Phase Change—The Heat Pipe Effect, A. Izzeldin, E. Hanson and R. Boehm, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2475-2480.

Voluntary vs. Directed Siting - Or Somewhere In-Between? Elizabeth Peelle, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

Wase studiagement, Figil Evel Radioster Wasse Frogram Committee, 1994), p201-212.

Wave Setup Near a Seawall: Experiments and a Numerical Model, K. A. Rakha and J. W. Kamphuis, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p835-848.

Expert systems

Application of Fuzzy Logic in Civil Engineering in Japan, Hitoshi Furuta, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1900-1907.

Automated Corrective Action Selection Assistant, Alan D. Russell and Aminah Fayek, CO Mar. 94, p11-33.

Bridge Condition Rating Using Fuzzy Sets and an Eigenvector of Priority Settings, Hani G. Melhem and Senaka Aturaliya, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1908-1915.

Bridge Evaluation Using a Hybrid Information System, John L. Wilson and Stephanie J. Wagaman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p1131-1136.

Bridge Fabrication Error Solution: Developing a Knowledge-Based Expert System for a State Department of Transportation, W. M. Kim Roddis and Michael R. Hess, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1687-1694.

Building Code of Australia Expert Assistant - Putting Re-Building Code of Australia Expert Assistant - Putting Re-search into Practice, Ron Sharpe, Stephen Oakes, Philip Haselden and Ian Davidson, (Computing in Civil Engi-neering, Khalil Khozeimeh, ed., 1994), p1679-1686. Building KBES for Diagnosing PC Pile with Artificial Neural Network, Yi-Cherng Yeh, Yau-Hwaug Kuo and Deh-Shiu Hsu, CP Jan. 93, p71-93.

Computer-Based Advisors for Environmentally Conscious "Green" Product Design, Antonio Diaz-Calderon, Steven Fenves, James Garrett and Chris Hendrickson, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1497-1504.

Computing in Civil Engineering, 2 vols. Khozeimeh, ed., 1994, 0-7844-0026-1, 2275pp. 2 vols., Khalil Construction Expertise Transfer with Knowledge Based Systems, Hans Björnsson and Bjarni P. Hjaroar, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p964-971.

Decision-Support System for Long-Range Stream Flow Forecasting, Michael Bender and Slobodan P. Simono-vic, CP Jan. 94, p20-34.

Design of Clay Liner Permeability at Laboratory Scale Using Expert Systems, Imad A. Basheer, Wissam A. Naouss and Lakshmi N. Reddi, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p273-276.

Development of a Knowledge-Based System for Sanitary Landfill Design, H. Basri and E. I. Stentiford, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p1257-1264.

Development of an Expert System for Daily Drought Monitoring, T. J. Chang, H. Zheng and X. A. Kleopa, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p630-639.

Development of an Expert System to Identify Hazardous Highway Spots, Joseph E. Hummer and Paul R. Sloup, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p333-340.

The Development of an Expert System Used in Preliminary Design of Concrete Bridges, Nicolaas Stuurstraat and Cornelis van der Veen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p909-912.

Empirical Guidance for Siting Berms to Promote Stability or Nourishment Benefits, Edward B. Hands and Donald T. Resio, (Dreaging '94, E. Clark McNair, Jr., ed.,

1994), p220-228.

ESPADD.BR: Expert System Producing Automated Designs and Drawings for Bridges, Charles Tung and Louis Berger, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p913-921.

Expert Analysis in Regulated Irrigation Canal Modelling, Forrest M. Holly, Jr. and John P. Parrish, (Hydraulic En-gineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p92-96.

Expert System for Bridge Scour and Stream Stability, Suzanne Pollon, Lea Adams, Richard Palmer and George Turkiyyah, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1389-1396.

Expert System with Learning Ability for Retrofitting Steel Bridges, Ichizou Mikami, Shigenori Tanaka and Akira

Kurachi, CP Jan. 94, p88-102.

A Formal Expert Judgment Procedure for Performance Assessments of the Waste Isolation Pilot Plant, Kathleen M. Trauth, Robert V. Guzowski and Stephen C. Hora, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1745-

Heuristic Knowledge-base Approach to Runoff Estimation in Midwestern States Using a SCS Curve Number Method, Jaewan Yoon and G. Padmanabhan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p410-

Hydraulic Engineering '94, 2 vols, ISSN: 1070-1559, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994,

0-7844-0037-7, 1375pp.

Image-Based Expert-System Approach to Distress Detec-tion on CRC Pavement, Stephen Tsao, Nasser Kehtarna-vaz, Paul Chan and Robert Lytton, TE Jan./Feb. 94, p52-64.

An Inductive Knowledge-Based System for Mitigation of Bridge Fabrication Errors, Srinath Nagaraja and Hani Melhem, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1083-1090.

Integrated System Environment Using an Object-Oriented Project Model with Multiple-Views, Kenji Ito, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1204-1211.

Integrated System for Managing Owner-Directed Project Acceleration, Nagui I. Riad, David Arditi and Jamshid Mohammadi, CO Mar. 94, p77-95.

Integrated System to Develop Highway Rehabilitation Projects, Sarosh I. Khan, Stephen G. Ritchie and Karl Kampe, TE Jan./Feb. 94, p1-20.

Integration of Water Quantity and Quality Planning, Luiz G. Azevedo, Timothy K. Gates and Darrell G. Fontane, (Water Policy and Management: Solving the Problems. Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p388-391.

A Knowledge-Based Computer System for Financial Wind Risk Management, Auguste C. Boissonnade and Surya K. Gunturi, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2191-2198.

Knowledge-Based Design of Project-Procurement Process. R. A. Mohsini, CP Jan. 93, p107-122.

Knowledge-Based Expert System for Concrete Mix Design, Yong Bai and Serji N. Amirkhanian, CO June 94, p357-373.

Knowledge-Based Expert Systems For Geotechnical Factors in Dredging, S. Joseph Spigolon, Reda M. Bakeer and Jack Fowler, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p269-278.

Knowledge-Based System for Wind Damage to Building Kishor C. Mehta, Douglas A. Smith and Ronald H. Cheshire, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p726-735.

Knowledge-Intensive Database System for Making Effective Use of Construction Lessons Learned, Nabil Kartam, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p1139-1145. Lake Ontario Regulation Utilizing an Expert System Approach Constrained by Interest Satisfaction Relation-ships, Anthony J. Eberhardt, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p149-152.

Machine Learning in Civil Engineering - Important Issues

and Challenges, Benoît Julien, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p877-884.

Methodology for Forensic Investigations of Seismic Damage, Duane Castaneda and Colin Brown, ST Dec. 94, p3506-3524.

An Object-Oriented Scheduling Data Acquisition Model Using a Hybrid Expert System, Kyungrai Kim, Calin M. Popescu and Gary D. Hamilton, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p356-361.

Precedents in Design: A Computational Model for the Organization of Case Knowledge, Rivka Oxman, (Computational Model) ing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

Professional Involvement in Development of Expert Systems for Construction Industry, P. S. Brandon and I. D. Watson, CP Oct. 94, p507-518.

Prototype Object-Oriented System for Maintenance of Timber Trusses, S. H. C. Foo and G. Akhras, CP July 94, p326-344.

Quality Management of Earthwork Using Knowledgebased Systems, Shrinath J. Kotdawala and Imad A Basheer, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p426-429.

Real-Time Decision-Support System for Freeway Manage-ment and Control, Hongjun Zhang and Stephen G. Ritchie, CP Jan. 94, p35-51.

Representation of Case Memory for Structural Design, Mary Lou Maher, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2030-2037.

Representing Design Cases Based on Methods, B. Raphael, B. Kumar and I. A. McLeod, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p255-292.

Reservoir Operation by the Use of an Expert System, Tiao J. Chang and David Moore, (Hydraulic Engineering '94, George V. Ccroneo, ed. and Ralph R. Rumer, ed., 1994), p97-104.

SCREENER - An Expert System tool for Environmental Impacts Evaluation and Mitigation, P. Nathan Daniel, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1355-1359

SELECTCRANE: An Expert System for Optimum Crane Selection, Awad S. Hanna, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p958-963.

Selection of Earth Retention Systems Using Expert System, V. Sinha, M. Arockiasamy and A. Sinha, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p418-

Startplan: Producing Schedule Templates Using IRMA, Thomas Froese and Qiang Kevin Yu, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p63-

The Use of Expert Judgment Elicitation to Predict Future Climate for the Yucca Mountain Nevada Vicinity, Aaron DeWispelare, Michael P. Miklas, Jr., A. Berge Gureghi-Tandy Herren, Robert T. Clemen and James R. Park, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1614-1621.

Use of Expert Systems in Selecting Equilibrium Isotherms of Organic Compound Adsorption on Activated Carbon, Imad A. Basheer and Shrinath Kotdawala, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p640-643.

Validation of Knowledge-Based System with Multiple Bridge Rail Experts, Paul N. Roschke, TE Sept./Oct. 94,

Expert witness

Standard of Care in Civil Litigation, Robert W. Day, EI Apr. 94, p145-148.

Exploration
Enhancing Nuclear Waste Disposal Safety by Exploiting
Enhancing Nuclear Waste Disposal Safety by Exploiting
Enhancing Nuclear Waste Disposal Safety by Exploration Proposal Safety Regional Groundwater Flow—An Exploratory Proposi-tion, József Tóth and Grant Sheng, (High Level Radioac-tive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1797-1804.

Exploration as a Basis of Creative Engineering Design, John S. Gero, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p1824-1831.

The Impact of the Doe Decision Making Process at the Waste Isolation Pilot Plant with Respect to Petroleum Reserves, Matthew Silva, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1753-1761.

Isotopic Tracers of Gold Deposition in Paleozoic Lime-stones, Southern Nevada, Z. E. Peterman, B. L. Wid-mann, B. D. Marshall, J. N. Aleinikoff, K. Futa and S. A. Mahan, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1316-1323.

New Approaches for Determination of Rock and Rock Mass Properties at Dredging Sites, Hardy J. Smith, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p259-

268

Oil and Gas Exploration Near Yucca Mountain, Southern Nevada, John A. Grow, Charles E. Barker and Anita G. Harris, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1298-1315.

Preliminary Results of Investigation of the Ukrainian Shield Geological Formations for Radioactive Wastes Disposal, L. S. Galetsky, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1886-1890.

Explosion effects

Civilian Structures: Taking the Defensive, Paul Wei-

dlinger, CE Nov. 94, p48-50.

Model Studies of Effects on Lunar Soil of Chemical Exploions, Chaun-Ping Lin, Deborah J. Goodings, Leonhard E. Bernold, Richard D. Dick and William L. Fourney, GT Oct. 94, p1684-1703.

Explosions

Civilian Structures: Taking the Defensive, Paul Wei-dlinger, CE Nov. 94, p48-50.

Ground Motions and Air-Blast Effects of Explosive Demolition of Structures, Charles H. Dowding, CO Dec. 94, p838-856.

Safety Assessment of a Chemical Reactor Vessel, A. Wiedermann, A. Longinow and F. Calabrese, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1-6.

Structural Assessment of Bomb Damage for World Trade Center, Ennala Ramabhushanam and Marjorie Lynch,

CF Nov. 94, p229-242.

Trapped in an Elevator during the World Trade Center Bombing: A Personal Account, Satinder P. S. Puri, CF Nov. 94, p217-228.

Explosives
Bubba, A Teleoperated Countermine Vehicle, Dave Hayward, Bryan Pletta, Jerry Clifford and Kerry Habiger, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p464-473.

The Engineer Vehicle Tele-operation Capability, David J.

Busse and Joseph R. Urda, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer,

ed., 1994), p474-480.

ed., 1994), Pt-4-60.

Photocatalytic Transformations and Degradation of 2.4.6-trinitrotoluene (TNT) in TiO2 Slurries, Daniel C. Schmelling and Kimberly A. Gray, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p751-755.

Unexploded Ordnance (UXO) and Dredging, Timothy Welp, James Clausner, Raymond Pilon, Joan Pope and Richard Lewis, (*Dredging '94*, E. Clark McNair, Jr., ed.,

1994), p48-55.

Extraction procedures
Air Permeability from Pneumatic Tests in Oxidized Till,
Kenneth B. Edwards and LaDon C. Jones, EE Mar/Apr. 94, p329-347.

In-situ Extraction of Lunar Soil Volatiles, Layton J. Wittenberg, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj,

ed., 1994), p687-696.

Optimization of the Design and Operation of Soil Vapor Extraction Systems, Marshall W. Davert and William W-G. Yeh, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p181-184.

Oxygen from Lunar Soil via Fluorination, Wolfgang Seboldt, Stephan Lingner, Stephan Hoernes and Wolfgang Grimmeisen, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1210-1219.

A Probability Based Approach to the Design and Operation of Soil Vapor Extraction Systems, Kenneth K. Kebbell and William F. McTernan, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p564-571. Thermally Enhanced Bioremediation of a Gasoline-

Contaminated Aquifer Using Toluene Oxidizing Bacteria, Rula Deeb and Lisa Alvarez-Cohen, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p400-407.

Vortex-Tube Sediment Extractors. Part I: Trapping Efficiency, Edmund Atkinson, HY Oct. 94, p1110-1125. Vortex-Tube Sediment Extractors. Part II: Design, Edmund

Atkinson, HY Oct. 94, p1126-1138.

Extraterrestrial bases

Extraterrestral bases
Alternative Habitat Concepts for the First Lunar Outpost,
Kriss Kennedy and Michael Roberts, (Engineering, Con-struction, and Operations in Space IV, Rodney G. Gal-loway, ed. and Stanley Lokaj, ed., 1994), p1020-1035.
Atmospheric Pressure within Lunar Structure, Paul S.
Nowak, Jeffrey Janakus and Charles E. Mitchell, AS Oct.

94, p398-410.

Construction of a Lunar Base, Dave Torres, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p799-803

Design and Construction of Shielded Lunar Outpost, S. D. Jolly, J. Happel and S. Sture, AS Oct. 94, p417-434.

Dust Levitation on the Moon, Frederick A. Slane, Nebojsa

Duric and Jack O. Burns, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p897-906.

Efficient Path Planning Strategies for Unmanned Rover Vehicles, Kevin K. Gifford and George W. Morgenthaler, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1288-1308.

Engineering, Construction, and Operations in Space IV, 2 vols, Rodney G. Galloway, ed. and Stanley Lokaj, ed.,

1994, 0-87262-937-6, 1560pp.

Gravitational Wave Astronomy and the Lunar Ligo Concept, Norman LaFave and Thomas L. Wilson, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1442-1451.

Habitat Configuration Evaluation Criteria for Moon/Mars, Kriss J. Kennedy, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p979-987.

Is It Possible to Colonize Mars? Jonathan Hurley and Steve Garcia, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p782-786.

Living in Space, Michael Wifall, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p842-845.

Mars Terraformation Revisited, Joseph Guarascio, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p774-781.

A Near-Term, Long-Duration, Lunar Outpost Design, S. Sture, S. D. Jolly and J. Happel, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p237-246.

Recycled Engineering Applied to the First Lunar Outpost, Todd C. Parfet and Belinda S. Deeds, Lengineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p988-997.

Reduction, Reuse, and Recycling on a Future Lunar Base, Sarah Soliz, Laura Symonds and Christine Willan, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p804-810.

Reservoir Estimates for the Sulpicius Gallus Region, Bonnie Cooper, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley

Lokaj, ed., 1994), p889-896.

Robotic Options for Mining of Near-Earth Objects, Russell J. Miller and Robin R. Murphy, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p457-463.

A Space Station of Mars, Kimberly Butler, (Engineering, Construction, and Operations in Space IV, Rodney C Galloway, ed. and Stanley Lokaj, ed., 1994), p787-792.

Fabrication

AISC's Higgins Award Goes to Griffis, NE May 94, p14.

Bridge Fabrication Error Solution: Developing a Knowlredge-Based Expert System for a State Department of Transportation, W. M. Kim Roddis and Michael R. Hess, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1687-1694.

Checking of CAD Drawings for Fabrication Issues, Jay Ernst and W. M. Kim Roddis, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p248-253

Corrosion of HLW Carbon Steel Containers in the Vapor Phase of Salt Brines, E. Smailos, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p963-968.

Denver International Airport Tensile Roof Case Study: The Fabrication and Construction Process, Martin L. Brown, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p969-978.

Design and Construction of Fiberglass Composite Building, Ed (Ahmed) Morsi and J. Larralde, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham,

ed., 1994), p751-757.

Space Frame Solution for the Design of Large Pyramid Structures, T. J. DeGanyar, M. D. Griffin and M. R. Patterson, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p47-56.

Spatial Structures Erected out of Thin Shell Elements Fabricated on Plane Followed by Bending, Vladimir V. Shugaev, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penal-

ba, ed., 1994), p867-876.

A Systems Approach to the Management of a Contaminat-ed Metal Recycle Project, Layne Pincock and Steven Wahnachaffe, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1069-1073.

Thermal Cycling of Thin and Thick Ply Composites, Stephen S. Tompkins, James Y. Shen and Andre J. Laoie, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p326-335.

Current State of Development and Future Trends in Em-ployment of Air-Supported Roofs in Long-Span Appli-cations, Kris P. Hamilton, David M. Campbell and Paul A. Gossen, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p612-621.

Fabric Roof Design Responds to New Technologies, Craig G. Huntington, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U.

Penalba, ed., 1994), p674-683.

Fabric Structures for Public Buildings, Horst Berger, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p583-591.

The Georgia Dome and Beyond: Achieving Lightweight -Longspan Structures, Matthys P. Levy, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p560-

Georgia Dome Cable Roof Construction Techniques, Wesley R. Terry, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U.

Penalba, ed., 1994), p563-572.

Helium-Supported Hangar for a Small Solar-Powered Airship, Rosemarie Wagner and Bernd Kröplin, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994),

History and Development of Fabric Structures, R. E. Shaeffer, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p979-989.

Load-Deflection Behavior of Space-Based Inflatable Fabric Beams, J. A. Main, S. W. Peterson and A. M. Strauss, AS Apr. 94, p225-238

The Use of ETFE Foils in Lightweight Roof Constructions, Craig Schwitter, (Spatial, Lattice and Tension Struc-tures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p622-631.

Wall Relief and Three Dimensional Suspension Sculpture Utilizing Tension and Membrane Structures, Warren Seelig, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p602-611.

Construction Facilities Audit: Quality System-Performance Control, Allan F. Samuels, ME July/Aug. 94, p60-65.

Developing Specifications for Cellular-Telephone Base Stations, John C. Woolery, CO Sept. 94, p593-602.

Dimensions and Management of Facility Performance, James C. Porter, El Jan. 94, p1-7.

The Integrated Systems Approach to Facilities Management, Robert A. Snodgrass, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2199-2207.

Linear Programming for Analysis of Material Recovery Facilities, Jay R. Lund, George Tchobanoglous, Robert P. Anex and Renée A. Lawver, EE Sept./Oct. 94, p1082-1094.

Valuation Analysis for Independent Power Project, Richard K. Ellsworth, EY Aug. 94, p86-96.

Future Concerns in Environmental Engineering Graduate Education, Richard G. Luthy, David A. Bella, James R. Hunt, James H. Johnson, Desmond F. Lawler, Charles R. O'Melia and Frederick G. Pohland, El Oct. 92, p361-

Problems Faced by Faculty in Minority Institutions, Emmanuel U. Nzewi, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p89-92.

Failure load

Collapse Load Calculated by Probability Based Analysis Compared to Full Scale Tower Test Results, Thien T. Do, Michael D. Miller, Leon Kempner, Jr., Troy D. Lyver and Wendelin H. Mueller, III., (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p48-59.

Empirical Mohr-Coulomb Failure Criterion for Concrete Block-Mortar Joints, M. Ayubur Rahman and Subhash

C. Anand, ST Aug. 94, p2408-2422.

Some Aspects of Determination of Pile Capacity by the Wave Equation, Mark R. Svinkin and Wondern Teferra, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p946-951.

Static Response of Fiberglass Pretensioned Columns, Mohsen Issa, Rajan Sen, Daniel Mariscal and Mohsen Shahawy, ST Dec. 94, p3634-3648.

Failure modes

Behavior of Pressure Tunnels and Guidelines for Liner Design, Gabriel Fernández, GT Oct. 94, p1768-1791.

Bond Development of Thermoplastic FRP Shear Rein-forcement Stirrups, Justin Currier, Christian Fogstad, David Walrath and Charles Dolan, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p592-597.

Causes of Roof Covering Damage and Failure Modes: Insights Provided by Hurricane Andrew, Thomas Lee Smith, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p303-312.

Characteristics of Mechanical Connectors for Construction of FRP Structures, Ed (Ahmed) Morsi and J. Larralde, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p991-1000.

Compressive Strength of Large Scale HSLA-80 Steel Cel-lular Sections of a Double Hull Ship Structure, Alan Ah-Kum Pang, James M. Ricles, Le-Wu Lu and Perry Green, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1538-1543.

Cyclic Performance of Riveted Connections, Roberto Leon, Gabriel P. Forcier, Charles W. Roeder and F. Robert Preece, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1490-1495.

The Effect of Composite Reinforcement on Structural Wood, Beckry Abdel-Magid, Habib J. Dagher and Tod Kimball, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p417-424

Failure of Residential Building Envelopes as a Result of Hurricane Andrew in Dade County, Florida, Clifford Oliver and Chris Hanson, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p396-508

Failure Stages in Timber Fixed Piers: Design for Minimal Reconstruction After a Storm, Jon Guerry Taylor and Mark D. Bolchoz, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p406-413.

Failures and Failure Mechanisms for Exterior Walls, Gene S. Sanders, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p509-518.

Impulsive Punching of Fiber-Reinforced Concrete Slabs, Pietro G. Gambarova and Cristiano Schumm, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p252-257.

Modification of Asphalt Binders: A Critical Evaluation Using the New SHRP Methods, H. U. Bahia, (Infrastructure: New Materials and Methods of Repair, Kim D.

Basham, ed., 1994), p859-879.

Performance of Offshore Platforms in Hurricane Andrew, Ahsan Kareem and Charles E. Smith, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p577-586.

Reliability Analysis of Open Drainage Channels under Multiple Failure Modes, Said M. Easa, IR Nov./Dec. 94, p1007-1024.

Reliability Analysis of Stiffened Panels, E. Nikolaidis, O. Hughes, B. M. Ayyub and G. J. White, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1466-1471.

Shock-tested R. C. Slabs: Significant Parameters, François Toutlemonde and Pierre Rossi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p227-232

State-of-the-Art Report on Seismic Performance of Unreinforced Masonry Buildings, Michel Bruneau, ST Jan. 94, p230-251.

Steel Compression Member Design in the 1994 Canadian Standard, D. J. Laurie Kennedy, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994),

p221-226. Success Syndrome: The Collapse of the Dee Bridge, Henry

Petroski, CE Apr. 94, p52-55.

Successes and Failures of Metal Building Systems During Hurricane Andrew, Nanette Dean, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p465-471.

Understanding the Modes of Failure for Sewers, Robert F. Serpente, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p86-100.

Failure surface

Effect of Permeability on Surficial Stability of Homogeneous Slopes, Daniel Pradel and Glen Raad, GT Feb. 93, p315-332.

Failures

1993 Mississippi Record Stages and Levee Failures, Sally McConkey, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p603-

Alternative Launch Systems Will They Replace the Shuttle? Daphne Burleson, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p472-577.

Analysis of Earthquake Fault Rupture Propagation through Cohesive Soil, Jonathan D. Bray, Raymond B. Seed and H. Bolton Seed, GT Mar. 94, p562-580.

Application of Fracture Mechanics to Soils: An Overview, Luis E. Vallejo, (Fracture Mechanics Applied to Geo-technical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p1-20.

Are Building Codes and/or Enforcement Adequate for Hurricane Protection? Lindsey E. Carter and Gary G. Ni-chols, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p626-631.

Behavior of Cast-Iron Spillway Gate Wheels, Dimos Polyzois and Walter J. Muzyczka, MT Nov. 94, p495-512.

Behavior of Reinforced High-Strength-Concrete Corbels, Yook-Kong Yong and P. Balaguru, ST Apr. 94, p1182-

1201.

Bulb-T and Glulam-FRP Beams for Timber Bridges, J. F. Davalos, H. V. S. GangaRao, S. S. Sonti, R. C. Moody and R. Hernandez, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1316-1321.

Cone-Cylinder Intersection under Pressure: Axisymmetric Failure, Jin-Guang Teng, EM Sept. 94, p1896-1912.

Contemporary Model of Civil Engineering Failures, Richard L. Meehan, Brian Chun, Sang-wuk Ji, Stephanie King, Knut Ronold and Frank Yang, El Apr. 93, p138-146

Contractor Entitled to Recover Damages from Project Lender, CE May 94, p30.

Cracking and Fracture Behavior of Soil, Hsai-Yang Fang, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p102-117.

Damage to Highway Infrastructure 1993 Mississippi River Basin Flooding, A. C. Parola, T. E. Fenske and D. J. Hagerty, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p26-30.

Destructive Testing of Decommissioned Concrete Slab Bridge, R. A. Miller, A. E. Aktan and B. M. Shahrooz, ST July 94, p2176-2198.

Detecting Dam Failures, C. Michael Knarr, Thomas J. Barker and Stephen F. McKenery, CE June 94, p66-67.

Dynamic Effects of Progressive Member Failure on the Response of Truss Structures, Ramesh B. Malla, Baihai Wang and Butchi B. Nalluri, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p60-76.

Earthquake Fault Rupture Propagation Through Soil, Jonathan D. Bray, Raymond B. Seed, Lloyd S. Cluff and H. Bolton Seed, GT Mar. 94, p543-561.

Effect of Temperature Changes on Water-Main Breaks, Ahmad Habibian, TE Mar./Apr. 94, p312-321. Energy-Based Failure Criterion for Wood, Timothy A.

Philpot, Kenneth J. Fridley and David V. Rosowsky, MT Nov. 94, p578-594.

Erosion Hazards and Coastal Construction Deficiencies Observed on Kauai After Hurricane Iniki, A. Todd Davison, Charles E. Bornman and Melvin Nishihara, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p736-745.

Failure as Source of Engineering Judgment: Case of John Roebling, Henry Petroski, CF Feb. 93, p46-58.

Failure of Large Diameter High Density Polyethylene Sewer Pipe a Case in Point, Jey K. Jeyapalan and Joe A. Conner, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p356-371.

Failures of Residential Building Basements in Ohio, C. F. Diaz, F. C. Hadipriono and S. Pasternack, CF Feb. 94,

p65-80.

Fatigue of Prestressed Concrete Beams with Inclined Strands, John F. Muller and Peter F. Dux, ST Apr. 94, p1122-1139.

Finite Element Limit Load Analysis by the Static Approach Using Nonlinear Programming, Hichem Smaoui, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1936-1943.

First-Passage Time of Secondary System Mounted on Yielding Structure, David C. K. Chen and Loren D.

Lutes, EM Apr. 94, p814-834.

Functional Analysis of the Envelope Design Process for In-tegrated Building Design, Hugues Rivard, Claude Bédard, Kinh H. Ha and Paul Fazio, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p71-78.

Human Error Models for Structural Reliability, Eric P. Steinberg, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p199-204.

Human Factors in Civil and Geotechnical Engineering Failures, George F. Sowers, GT Feb. 93, p238-256.

Hyperspace Division Method for Structural Reliability, Satoshi Katsuki and Dan M. Frangopol, EM Nov. 94, p2405-2427.

Identifying Causes of Failure in Providing Geotechnical and Environmental Consulting Services, Douglas Moorhouse and Richard A. Millet, ME May/June 94,

The Influence of Fines Type and Content on Cyclic Strength, Joseph Patrick Koester, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p17-33.

Integrated Modelling of Near Field and Engineered Barrier System Processes, Alan Lamont and James Gansemer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1195-1201.

Integration of Multiple Advanced Analytical Techniques to Study Alkali Silica Reactivity in Concrete Railroad Ties, R. J. Lee, A. J. Schwoeble, K. E. Wagner and J. Yuan, (Cement Manufacture and Use, Paul W. Brown, ed.,

1994), p217-229.

Large Deformation Analysis of Lattice Truss Structures In-cluding Hysteretic Material Behavior, Nayla Khattar, George E, Blandford and Shien T. Wang, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p499-508

Liquefaction and Embankment Failure Case Histories, 1988 Armenia Earthquake, M. K. Yegian, V. G. Ghahra-man and R. N. Harutiunyan, GT Mar. 94, p581-596.
Liquefaction-Induced Lateral Spreading of Mildly Sloping Ground, Gregg L. Fiegel and Bruce L. Kutter, GT Dec. 94, p2236-2243.

Mechanical Behavior of Dowels Embedded in Concrete, Luigi Biolzi and Natalino Gattesco, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p630-635.

Parametric Study on Collapse Loads of Skew Composite Bridges, Alaa Helba and John B. Kennedy, ST May 94,

Performance of Manufactured Housing in Louisiana During Hurricane Andrew, Marc L. Levitan, Leighton S. Cochran and Janet E. Levitan, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p166-175.

Predicting Pipe Failure Effects in Water Distribution Net-works, P. W. Jowitt and Chengchao Xu, WR Jan./Feb.

93, p18-31.

Prestressed Concrete Failures Due to Uplift, Wimal Suaris, (Structures Congress XII, N. C. Baker, ed. and Barry J.

Loodno, ed., 1994), p1433-1438.

Racine's Water Street Retaining Wall, Steven W. Hunt, Randy L. Frank, Paul A. Tarvin and James J. Blazek, (Serviceability of Earth Retaining Structures, Richard J.

Finno, ed., 1994), p137-154. Representation and Processing of Design Standards: a Bifurcation between Research and Practice, Steven J.

Turcation between Research and Fractice, Steven J. Fenves, James H. Garrett and M. Maher Hakim, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p122-127.
Role of Vortex-Excited Vibrations in Damage to Power Poles in Hurricane Andrew, Richard A. Skop and Ahmad H. Namini, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p567-576.
Scaling Laws in Mechanics of Failure, Zdeněk P. Bažant,

EM Sept. 93, p1828-1844.

Second-Order Upper Bounds on Probability of Intersection of Failure Events, Qiang Xiao and Sankaran Mahadevan, EM Mar. 94, p670-674

Seismic Shear Strength of Reinforced Concrete Columns, M. J. Nigel Priestley, Ravindra Verma and Yan Xiao, ST Aug. 94, p2310-2329.

Sewerage Failure, Diagnosis and Rehabilitation, J. W. Delleur, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p11-28.
Shallow Tunnels in Cohesionless Soil: Stability of Tunnel

Face, Pierre Chambon and Jean-François Corté, GT July

94, p1148-1165. Soil Nailing Saves Distressed Timber Wall, James Harms ton and Gary W. Rhodes, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p130-

A Stochastic Framework for the Modeling of Failures in Urban Drainage Systems due to Microscale Effects, P. La Barbera, L. Lanza and U. Parodi, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p197-208. Stress-Path Dependent Shear Strength of Sand, J. Feda, GT

June 94, p958-974.

Structural Capacity of Precast Piles with Grouted Base, Osamu Kusakabe, Masaaki Kakurai, Katsutoshi Ueno and Yoshinao Kurachi, GT Aug. 94, p1289-1306.

Structural Performance of a Multipurpose Canister Shell for HLNW Under Normal Handling Conditions, Samaan G. Ladkany and Rajkumar Rajagopalan, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p984-992. Substantiated Risk Assessment of Jacket Structure, P. S. Tromans and J. W. van de Graaf, WW Nov./Dec. 94,

p535-556.

Test Experience with Heavy Angle Dead End Lattice Transmission Towers, J. M. Ferguson, D. D. Cannon and R. E. Nickerson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p601-606. Understanding the Modes of Failure for Sewers, Robert F. Serpente, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p86-100.

Using Hydrophones to Monitor Prestressed Concrete Pine for Reinforcing Wire Failures, Douglas J. Buchanan, Malin L. Jacobs and Fred A. Travers, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p212-225.

Failures, investigations

Collapse of Geogrid-Reinforced Retaining Structure, Ger-ald A. Leonards, J. David Frost and Jonathan D. Bray, CF Nov. 94, p274-292.

Common Causes of Collapse of Metal-Plate-Connected Wood Roof Trusses, Harvey A. Kagan, CF Nov. 93,

p225-234.

Down Drag on Friction Piles: A Case History, Yalcin B. Acar, R. Richard Avent and Mohd R. Taha, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p986-999.

Hurricane Andrew Induced Damage to Florida Power & Light's Transmission System, C. Jerry Wong, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed.,

1994), p387-396.

Investigation of L'Ambiance Plaza Building Collapse, Daniel A. Cuoco, David B. Peraza and Thomas Z. Scarangello, CF Nov. 92, p211-231.

Structural Failure and Quality Assurance of Space Frames, Tien T. Lan, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p123-132.

Success Syndrome: The Collapse of the Dee Bridge, Henry Petroski, CE Apr. 94, p52-55.

Sudden Pressure Drop and Pipeline Failure - Case Studies, E. John List, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p339-355.

Falling bodies

Impact of Weight Falling onto the Ground, Jose M. Roesset, Eduardo Kausel, Vicente Cuellar, Monte and Julian Valerio, GT Aug. 94, p1394-1412.

Structural Evaluation of Airfield Rigid Pavements Using Falling Weight Deflectometer, Boming Tang, TE May/ June 93, p467-476.

An Auxiliary Ventilation Design Approach for the ESF Development at Yucca Mountain, P. Mousset-Jones and F. Calizaya, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p508-514.

Near Field Behavior of a Far Field Circulation Model, Xueyong Zhang, Eric Adams, Alan Blumberg, Z. G. Ji and Kirk Ziegler, (*Hydraulic Engineering* '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p155-159.

Farm management

Development of a Geographical Information System for On Farm Management, Malinda Fowler, Don R. May, Omnia El-Hakim, A. Bennally, A. Johnson, S. Spaulding, Wilson Begay and Timothy K. Gates, (Water Policy and Management: Solving the Problems, Darrell G. Forstrow, and Haws, N. Towal et al. (1904), p. 12, 135 Fontane, ed. and Harry N. Tuvel, ed., 1994), p132-135.

Corps-Modified Levees Just Ducky for Waterfowl, CE Apr. 94, p22.

Fast track construction

Fast Foundation for Soft Clay, Joseph R. Hilton, Jr., Richard L. Novotny and Ronald E. Rager, CE Mar. 93,

A League of Their Own, Paul Tarricone, CE May 94, p58-

Fasteners

Behavior of Bolted Joints in 3-D Braided Composites, Rona L. Reid and Aly El-Shiekh, (Engineering, Con-struction, and Operations in Space IV, Rodney G. Gal-loway, ed. and Stanley Lokaj, ed., 1994), p287-295. Characteristics of Mechanical Connectors for Construction

of FRP Structures, Ed (Ahmed) Morsi and J. Larralde, (Infrastructure: New Materials and Methods of Repair,

Kim D. Basham, ed., 1994), p991-1000.

Evaluation of Roof Sheathing Fastening Schedules for High Wind Uplift Pressures, Thomas P. Cunningham, Ir., (Hurricanes of 1992: Lessons Learned and Implica-tions for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p330-339.

Testing Methods for Roof Systems, Phillip J. Smith, (Hur-

ricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani,

ed., 1994), p340-349.

Uplift Resistance of Plywood and OSB Roof Sheathing, S. D. Shiff, D. P. Mizzell and M. D. Zaitz, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1054-1059.

Fathometers

Field Performance of an Acoustic Scour-Depth Monitoring System, Robert R. Mason, Jr. and D. Max Sheppard, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p366-375.

Fatigue

Accurate and Rapid Determination of Fatigue Damage in Steel Bridges, C. Hahin, J. M. South, J. Mohammadi and R. K. Polepeddi, ST Jan. 93, p150-168.

Acoustic Emission Monitoring of Fatigue Crack Growth in HSLA-80 Steel Box Beams, Stephen Pessiki and Steven Derrah, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1334-1339. Application of High-Performance Steel in New and Re-

trofit Structures, Robert J. Dexter, Le-Wu Lu and John W. Fisher, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p336-343.

Bridge Evaluation Using a Hybrid Information System, John L. Wilson and Stephanie J. Wagaman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p1131-1136.

Bridge Rehabilitation Using Composite Materials, William W. Finch, Jr., Michael J. Chajes, Dennis R. Mertz, Victor N. Kaliakin and Ahmad Faqiri, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1140-1147.

Corrosion Fatigue of Stiffened Offshore Steel Tubular Joints, D. S. Ramachandra Murthy, A. G. Madhava Rao and A. R. Santhakumar, ST July 94, p1991-2010.

Design for Durability for Large Reinforced Concrete Shells, Wilfried B. Krätzig, Konstantin Meskouris and Karsten Gruber, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p897-906.

Durability of Composite Material Reinforcement, Michael J. Chajes, Dennis R. Mertz, Theodore A. Thomson, Jr. and Cory A. Farschman, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994),

p598-605

Durability of Concrete Materials Under Pavement Joints, Stephen R. Munoz and Eddie Y. J. Chou, (Infrastruc-ture: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1-7.

Expert System with Learning Ability for Retrofitting Steel Bridges, Ichizou Mikami, Shigenori Tanaka and Akira

Kurachi, CP Jan. 94, p88-102.

Fatigue Crack Growth Rate of Metal by Plastic Energy Damage Accumulation Theory, Wei Wang and Cheng-Tzu Thomas Hsu, EM Apr. 94, p776-795.

Fatigue Cracking and Rutting in Flexible Pavements, D. V. Ramsamooj, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p132-146.

Fatigue Damage Accumulation Under Stochastic Stress Histories, Shahram Sarkani, Naser K. Buresli and George Michaelov, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p839-844.

Fatigue-Reliability Evaluation of Steel Bridges, Zhengwei ao, Achintya Haldar and Florence L. Breen, Jr., ST May 94, p1608-1623

Fatigue-Reliability Updating Through Inspections of Steel Bridges, Zhengwei Zhao, Achinyta Haldar and Florence L. Breen, Jr., ST May 94, p1624-1642.

Focusing on Fatigue, Peter B. Keating, CE Nov. 94, p54-57

FRP Box-Beams Under Long-Time Static and Fatigue Loading, Urs Meier, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p411-416.

FRP Research for Highway Applications in Florida, Rajan Sen and Mohsen Shahawy, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p280-286.

Fundamental Considerations of Design and Durability in Composite Rehabilitation Schemes for Steel Girders with Web Distress, S. B. Shulley, X. Huang, V. M. Kar-bhari and J. W. Gillespie, Jr., (Infrastructure: New Mate-rials and Methods of Repair, Kim D. Basham, ed., 1994), p1187-1194.

Hot Spot Stresses of Tubular Joints Subjected to Combined Loadings, Ai-Kah Soh and Chee-Kiong Soh, ST Feb. 93,

p654-661.

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In-Place Determination of Concrete Strength by the Impact-Echo Method, Stephen Pessiki and Matthew Johnson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1340-1345.

Influence of Surface Finish on Sorptivity on Concrete, W.

J. McCarter, MT Feb. 93, p130-136.

Life Prediction of Materials/Systems of Transportation Infrastructure, K. P. George, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1081-1088.

Low-Cycle Fatigue Behavior of Reinforcing Steel, J. B. Mander, F. D. Panthaki and A. Kasalanati, MT Nov. 94, p453-468.

Optimum Number of Specimens for Low-Cycle Fatigue Tests of Concrete, Todorka Paskova and Christian Meyer, ST July 94, p2242-2247.

Prototype to Product - Challenge and Frustrations, Ian F. C. Smith, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1695-1702.

A Reliability Model for Fatigue and Corrosion of Hydrau-Rehability Model for Fangue and Corrosion of Hydraulic Steel Structures, Joseph Padula, Cameron Chasten, Paul Mlakar and Reed Mosher, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1217-1224.

Rheological Characterization of Asphaltic Mixtures Under Repetitive Loading, Y. R. Kim and Y. C. Lee, (Infra-structure: New Materials and Methods of Repair, Kim

D. Basham, ed., 1994), p796-803.

The Role of Shale Pores in Settlement, Luis E. Vallejo, Michael K. Robinson and Ann C. Stewart-Murphy, (Verti-cal and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1425-1434.

Simple Live Load Distribution Factors for Girder Bridges, Sami W. Tabsh, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p497-502.

Surface Preparation of Steel for Adhesive Bonding in Re-habilitation Applications, Steven H. McKnight, Pierre E. Bourban, John W. Gillespie, Jr. and Vistasp M. Karbhari, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1148-1155.

Fatigue life

Application of Field Data to Serviceability and Life Prediction of Highway Bridges, Jamshid Mohammadi, Sidney A. Guralnick and Ramakrishna Polepeddi, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1089-1096.

Corrosion Fatigue of Stiffened Offshore Steel Tubular Joints, D. S. Ramachandra Murthy, A. G. Madhava Rao and A. R. Santhakumar, ST July 94, p1991-2010.

Cumulative Impact of Heavy Permit-Trucks on Steel Bridges, Michel Bruneau and Murat Dicleli, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p97-102.

Fatigue Lifetime with Load Uncertainty Represented by Convex Model, Yakov Ben-Haim, EM Mar. 94, p445-

Fatigue of Prestressed Concrete Beams with Inclined Strands, John F. Muller and Peter F. Dux, ST Apr. 94, p1122-1139.

Optimum Number of Specimens for Low-Cycle Fatigue Tests of Concrete, Todorka Paskova and Christian Meyer, ST July 94, p2242-2247.

Fatigue strength

Fatigue Strength of Weathered Rolled Beam Made of A588 Steel, Pedro Albrecht and Camille Shabshab, MT Aug. 94, p407-428.

Welded Wire Fabric for Bridges II. : Fatigue Strength, Bilal M. Ayyub, Peter C. Chang and Naji A. Al-Mutairi, ST June 94, p1882-1892.

Feasibility studies

Concept for a Mixed Use Recreational Harbor on Lake Su-perior, Kenneth M. Cobb and Dorian Grilley, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p104-113.
The Control of Settlement Using Geogrids, Gunther E. Bauer, (Vertical and Horizontal Deformations of Four-

dations and Embankments, Albert T. Yeung, ed. and

Guy Y. Félio, ed., 1994), p491-501.

Deployable Mesh Reflector, Z. You and S. Pellegrino, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p103-112.

Feasibility Analysis of Automated Material Handling for Hazardous Waste Remediation, Andrew F. Griffith, Carl T. Haas and Richard L. Tucker, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R.

Klarer, ed., 1994), p338-346. Feasibility of Dual Technology in Manufacturing Lunar neering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p933-941.

Feasibility of Treating Synthetic Greywater by Culturing Waldmann's Dark Green Lettuce in a Hydroponic System, Ricardo B. Jacquez and Michael Montoya, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1256-1265.

Feasibility of Using MPCs for DOE Research and Production Fuel, Daryl A. Lopez and David G. Abbott, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p457-466.

Impervious Cover Extraction Using Remote Sensing/GIS, Stuart B. Murchison, John M. Hunt and Steven C. (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p127-131.

Kentucky's Experience with CRM-HMA, Kamyar C. Mahboub, Karen A. Sizemore, Robert D. Bosley and Philip A. Creamer, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p432-440.

Lewis and Clark Rural Water System: A Regional Approach to Solving Domestic Water Supply Problems for a Tri-State Area, Pamela A. Bonrud, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p161-164.

Management of HFIR Spent Fuel, Victoria M. Green, John M. Begovich, A. L. Lotts and George F. Flanagan, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p338-342.

Menomonee Valley Greenway Feasibility Study, Therese Gripentrog, Wink Hastings and Eduard J. Freer, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p1-6. Production of Lunar Concrete Using Molten Sulfur, Husam

A. Omar and Mohsen Issa, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p952-959.

Reducing Wastewater Sludge Pathogens Using Heat Treatment, Mark Kennedy, Kondapalli Reddy and Lyle Johnson, (Critical Issue's in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p281-288. Settlement of Test Fills for Chek Lap Kok Airport, Dominic O. Kwan Lo and Gholamreza Mesri, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1082-1099

Synthetic Estimation of Development Cost of Satellite, Yilin Zhu, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1512-1520.

Use of Abandoned Pipeline to Transport Sediment to Marshes, Charles H. Coates, Jr., (Dredging '94, E. Clark

McNair, Jr., ed., 1994), p1101-1110.

Wind Lake Improvement Plan Dredging Project Wind Lake, Wisconsin, Robert W. Carr and Kathy Aron, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

Federal agencies

Demonstration Project for Scour Instrumentation, J. D. Schall, W. R. Ivarson and T. Krylowski, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p37-42. DOE's Dreyfus Seeks More Funds for Storing Hazardous

Waste as Deadline Nears, NE June 94, p1,4.

OSHA and the Design Professional, Arthur G. Sapper, CE

Apr. 94, p60-62. Technical Understanding in Successful Environmental Negotiations, Nina Burkardt, Berton L. Lamb and Terry J. Waddle, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p694-697.

Federal aid

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USAid to Alleviate Aral Sea Depletion, CE Feb. 94, p18-19

Federal control

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Federal government

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ASCE to White House: Improve Flood Controls, CE Aug. 94, p96.

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Critique: Rebuilding and Recovery, Ben L. Sill, (Hurri-canes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p300-302.

DOT Unveils Proposed National Highway System, CE Feb. 94, p98.

Engineers Must Play Power Game of Politics, CE Nov. 94,

Entrants Sought for Presidential Awards, CE Sept. 94, p8. Environmental Justice: Implications for Siting of Federal Radioactive Waste Management Facilities, J. Bennett Easterling and James S. Poles, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p63-67.

Federal Design Competition Opens Fourth Round, CE

Sept. 94, p76.

Federal Permits for Marina Development: Controlling the Process, Johnine J. Brown, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p144-153.

Federal Risk Management Policy: Where Are the Prob-lems? Anthony J. Thompson, (Risk-Based Decision Making in Water Resources VI, Yacov Y, Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994),

p1-18.

Federal Risk Management Policy: Where Is the Federal Government Heading? Where Are the Problems? Jonathan W. Bulkley, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p331-337.

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The Interactive Process: A Formal Means to Improved Re-lations, Allen Benson, A. C. Robison, Paul E. Seidler and Michelle D. Ulick, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p56-62.

Metric Design May Convert to Dollars, CE Nov. 94, p8. More Funding for R & D Needed in FY 1995 Budget, NE

Apr. 94, p1,3.

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An Overview of the Federal Response to Hurricane Iniki, Frank R. Finch, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p294-299.

Pentagon to Undergo Billion-Dollar Rehab, CE May 94,

p11-12

Protecting Human Health: Keeping Science in Risk Assessment and Balance in Risk-Based Regulations, Robert G. Tardiff, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p96-106.

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Asphalt Rubber a Federal Perspective, Joseph Massucco,

(Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p467-474.

Breakout Session 6A: Mass Transportation, Matthew Coogan, Lansingh Freeman and Victoria Rankin Marks, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p161.

Centralized Government Control: A Bad Idea, Paula P. Easley, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p53-78.

Conformity and the New Transportation Covenant, James M. Shrouds, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p1-18.

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ISTEA Enhances Transportation, Coc. 94, Po4-66.
Laws and Regulations Regarding Wetland Mitigation and Mitigation Banking, John D. Rogner, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p333-341.

MPOS Become VIPS, John Prendergast, CE Apr. 94, p40-43.

National Water Resources Regulation: Where is the Envi-ronmental Pendulum Now? Howard Holme, ed., 1994, 0-7844-0045-8, 275pp.

So Much Pavement, So Little Time, Paul Tarricone, CE

Nov. 93, p40-43.

Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994, 0-87262-914-7, 237pp.

U.S. Drinking-Water Regulations: Treatment Technologies and Cost, Benjamin W. Lykins, Jr. and Robert M. Clark, EE July/Aug. 94, p783-802.

A Wetland Mitigation Bank - An Economic Model, Doug-las L. Lashley, (Marinas, Parks and Recreation Devel-opments, Marshall Flug, ed. and Fred A. Klancnik, ed.,

1994), p352-359.

Wetland Mitigation Banks -- A Win-Win Situation, Robert D. Sokolove and P. Robert Thompson, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p342-351. 'Unholy Trinity' May Stall Environmental Measures, CE

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Federal project policy

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Education: Goals 2000, CE June 94, p108.

Federal Cleanups: Good News from Bad, Teresa Austin, CE Mar. 94, p48-51. Federal Public Works Infrastructure R&D: A New Perspec-

tive, Report No. 93-EF1003, Civil Engineering Research Foundation, 1993, 0-87262-943-0, 76pp.

The National Spatial Data Infrastructure and its Usefulness to the Dredging Community, Milington Lockwood, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p516-525

President Clinton Honors Federal Design Winners, CE July 94, p14,16.

Federal-state relationships

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Automated Construction-Simulation Optimization, Simaan AbouRizk and Jingsheng Shi, CO June 94, p374-385.

Circle Integration, John Kunz, Mark Clayton and Martin Fischer, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p55-62.

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Load-Deformation Curves of Normal and High Strength Concrete for a Range of Height to Diameter Ratios, D. C. Jansen and S. P. Shah, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p716-724.

Next Generation Space Telescope. I: Design Considera tions, B. Scott May and Nicholas P. Jones, AS Oct. 94,

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Next Generation Space Telescope. II: Proposed Pointing Control System, B. Scott May and Nicholas P. Jones, AS Oct. 94, p375-397.

Optimal Configuration of Active-Control Mechanisms. Mohamed Abdel-Mooty and John Roorda, EM Mar. 94,

p535-556.

Weighted Feedback for Groundwater Remediation, C. A. regined recodack for Groundwater Remediation, C. A. Shoemaker, G. J. Whiffen and J. A. Denu, (*Water Policy and Management: Solving the Problems*, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p189-192.

From Crane Safety to Watershed Management, ASCE Board Adopts Five New Policies, NE July 94, p15.

The Sqauntum Point Personnel Ferry and Metropolitan District Park, Quincy, Massachusetts, Patricia S. Loheed, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p370-376.

DOE Lab Develops System to Sack Sodium Nitrate, ET

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Effects of Golf Course Management on Pesticide and Fer-tilizer Fate, S. K. Starrett, N. E. Christians and T. A. Austin, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p526-533

Fiber composites

New Concept for Wrapping Columns with a High Strength Fiber/Epoxy System, Edward R. Fyfe, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1156-1162.

Fiber optics

Amplified Microbending in Coated Optical Fibres, John

Roorda, EM Apr. 94, p917-921.
Coherent Structures in Compound Open-Channel Flows by Making Use of Particle-Tracking Visualization Technique, Iehisa Nezu, Hiroji Nakagawa and Ken-ichi Saeki, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh,

ed., 1994), p406-415.

Experimental Study of Embedded Fiber-Optic Strain Gauges in Concrete Structures, S. F. Masri, M. S. Agbabian, A. M. Abdel-Ghaffar, M. Higazy, R. O. Claus and M. J. de Vries, EM Aug. 94, p1696-1717.

Fiber-Optic Bragg Grating Sensor for Nondestructive Evaluation of Composite Beams, Benxian Chen, M. H. Maher and Edward G. Nawy, ST Dec. 94, p3456-3470. Iowa Paves an Information Highway, CE June 94, p27.

Kinematics of Wave Overtopping on Marine Structure, J. J.

Lee, F. Zhuang and C. Chang, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p821-834.

LDV System for Towing Tank Applications, R. N. Parthasarathy and F. Stern, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p386-395.

Long-Term Monitoring of Civil Structures using Smart Structures Techniques, T. Russell Gentry, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1392-1402.

Fiber reinforced materials

Advances in Strain-Hardening Cement Based Composites, Victor C. Li, (Advances in Cement and Concrete, Mi-chael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p235.

Attempts to Introduce New Materials into Bridging, Edward Mark Lenoe, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p64-71.

Carbon and Steel Microfiber-Reinforced Cement-Based Composites for Thin Repairs, Nemkumar Banthia and Sylvie Dubeau, MT Feb. 94, p88-99.

Center Seeks Partner to Help Prove New Extrusion Process, ET Aug./Sept. 94, p9

Characterizing Fracture Behavior of Fiber-Reinforced Composites, Surendra P. Shah, Yixin Shao and Zongjin Li, (Advances in Cement and Concrete, Michael Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p186-199.

Control of Aging Processes in Wastepaper Fiber Reinforced Cement, Parviz Soroushain, Jong-Pil Won and Jer-Wen Hsu, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p539-544.

Determination of Interfacial Debond Mode for Fiber-Reinforced Cementitious Composites, Victor C. Li and Yin-Wen Chan, EM Apr. 94, p707-719.

Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993, 0-87262-946-5, 165pp.

Dynamic Response of Fibre-Reinforced Composite Plates Under Distributed Impact Loads, R. K. Mittal and M. R. Khalili, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p94-109.

Effect of Cold Regions Climate on Composite Jacketed Concrete Columns, V. M. Karbhari and D. A. Eckel, II,

CR Sept. 94, p73-86.

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Evaluation of Commercial Wood-Cement Composites for Sandwich-Panel Facing, Gebran N. Karam and Lorna J. Gibson, MT Feb. 94, p100-116.

Fibre Reinforced Concrete - Myth and Reality, Sidney Mindess, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p217-222

Flexural Analysis of Reinforced Concrete Beams Containing Steel Fibers, Byung Hwan Oh, ST Oct. 92, p2821-

Flexural Strength of Fiber Cementitious Composites, Mohamed Maalei and Victor C. Li, MT Aug. 94, p390-

High Modulus Glass-ceramic Fiber Reinforced Composites for Currently Emerging Infrastructure Applications, Frederick T. Wallenberger, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994),

Impulsive Punching of Fiber-Reinforced Concrete Slabs, Pietro G. Gambarova and Cristiano Schumm, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p252-257.

Late Stage Damage in G30-500/PMR-15 Laminates, Wieslaw K. Binienda, Anping Hong, Andrew Gyekenyesi and John Hemann, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p316-325.

Long Term Performance of Fiber Reinforced Cements and Concretes, Arnon Bentur, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L.

Sarkar, ed., 1994), p223-234.

Mechanical Properties of Kaolinite/Fiber Soil Composite, M. H. Maher and Y. C. Ho, GT Aug. 94, p1381-1393.

Mechanical Properties, Microstructure and Durability of Portland Cement-Based Systems Containing Micro-Reinforcement, Norman M. P. Low, I. Gagnon and J. J. Beaudoin, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p200-216.

Mechanics of Curved Fiber Bundles in Composites, David W. Jensen, Suresh P. Pai, Timothy R. Pickenheim and Colleen M. McCarty, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p276-286.

New Directions for Cement-Based Materials, J. Francis Young, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p610-611

New Formulation for Elastic Modulus of Fiber-Reinforced, Ouasibrittle Matrices, Jamil M. Alwan and Antoine E. Naaman, EM Nov. 94, p2443-2460.

Pullout of Inclined Fibers from Cementitious Matrix, C. Ouyang, A. Pacios and S. P. Shah, EM Dec. 94, p2641-

Strength of FRC Corbels in Flexure, Nijad I. Fattuhi, ST Feb. 94, p360-377

Use of Synthetic Fibers for Reinforcement of Thin Sheet Cement Products, Nazmi Sharabi, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p545-550.

Fiber reinforced plastics

Acoustic Emission Testing of Fiberglass Molded Grating, Kenneth Berg and J. Frank Mayfield, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p131-138.

Anchorage of Non-Metallic Prestressing Tendons, Richard J. Schmidt, Charles W. Dolan and Lars E. Holte, (Structures Congress XII, N. C. Baker, ed. and Barry J. Lood-

no, ed., 1994), p1415-1420.

no, ed., 1994), p1415-1420.
Application of FRP Reinforcement in Structural Precast Concrete, T. Russell Gentry and Lawrence C. Bank, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p575-582.
Bond Development of Thermoplastic FRP Shear Reinforcement of Christian Foogstad

forcement Stirrups, Justin Currier, Christian Fogstad, David Walrath and Charles Dolan, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p592-597.

Bulb-T and Glulam-FRP Beams for Timber Bridges, J. F. Davalos, H. V. S. GangaRao, S. S. Sonti, R. C. Moody and R. Hernandez, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1316-1321.

Characteristics of Mechanical Connectors for Construction of FRP Structures, Ed (Ahmed) Morsi and J. Larralde, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p991-1000. Compression Strength of Pultruded FRP Materials, Ever J.

Barbero and John Tomblin, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed.,

1994), p836-843

Concrete Beams with Externally Bonded Crabon Fiber Reinforced Plastic (CFRP) Strips, R. L. Sierakowski, C. A. Ross, J. W. Tedesco and M. L. Hughes, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p139-146.

Concrete Columns Reinforced with Fiber Reinforced Plastic Rebars, Saeed Daniali and Noel S. Paramanantham, (Infrastructure: New Materials and Methods of Repair,

Kim D. Basham, ed., 1994), p567-574.

Connections for Pultruded Composites: A Review and Evaluation, Ayman S. Mosallam, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1001-1017.

Cyclic Testing of Pultruded Fiber-Reinforced Plastic Beam-Column Rigid Connection, Michel Bruneau and David Walker, ST Sept. 94, p2637-2652.

Damage Tolerance of Thin Composite Reinforced Membrane Structures, Levon Minnetyan, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p296-305.

Design and Construction of Fiberglass Composite Building, Ed (Ahmed) Morsi and J. Larralde, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham,

ed., 1994), p751-757.

Detailing Effects in Anchors for FRP Prestressing Tendons, Todd Stueve, Charles W. Dolan and David E. Walrath, (Infrastructure: New Materials and Methods of Repair,

Kim D. Basham, ed., 1994), p386-391.

Development Length and Ultimate Strength of Fiberglass Pretensioned Beams, Mohsen A. Issa and Ahmed Amer, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p408-416.

The Effect of Composite Reinforcement on Structural Wood, Beckry Abdel-Magid, Habib J. Dagher and Tod Kimball, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p417-424.

Flexural Response of FRP Reinforced Concrete Structures, El-Attar A. El-bar, Ibrahim M. Ibrahim and Ayman S. Mosallam, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p583-591.

FRP Research for Highway Applications in Florida, Rajan Sen and Mohsen Shahawy, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p280-286.

Glulam Gets New Layers, New Strength and New Uses, ET Aug./Sept. 94, p8-9.

Hybrid Composite Beams: Analytical Modeling, S. A. Bhutta and I. L. Al-Qadi, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p178-190.

Innovations in Glulam Timber Bridge Design, Michael A. novanions in Cititati Hinder Bridge Design, whichaef A. Ritter, Thomas G. Williamson and Russell C. Moody, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1298-1303.

Local Buckling of Pultruded FRP Beams: Theory and Experiment, L. C. Bank, M. Nadipelli, T. R. Gentry and J. S. Yin, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p417-422.

Seismic Retrofit of Existing Reinforced Concrete Columns by Glass-Fiber Composites, L. Jin, H. Saadatmanesh and M. R. Ehsani, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p753-763.

Shear Failure of Concrete Beams Reinforced with Plates, M. Arduini, A. D'Ambris and A. Di Tommaso, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p123-130.

Specification Needs for FRP Composite Products, Craig A. Ballinger, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p56-63.

Static Behavior of Pultruded GFRP Sections, Hota V. S. GangaRao and V. Nagaraj, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994),

p844-848.

252

Testing of Concrete Curtain Wall Panels Reinforced with FRP Grids, Edwin R. Schmeckpeper, Richard Nielsen and Charles H. Goodspeed, (Structures Congress XII, N. . Baker, ed. and Barry J. Loodno, ed., 1994), p1250-

Tests on Deep I-Shape Pultruded Beams, A. Zureick and L. F. Kahn, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1572-1577.

Theoretical and Experimental Evaluation of FRP Components and Systems, Sotiris N. Sotiropoulos, Hota V. S. GangaRao and Ahmed N. K. Mongi, ST Feb. 94, p464-485

Time-Dependent Behavior of RC Members Strengthened With FRP Laminates, Nikolaos Plevris and Thanasis C.

Triantafillou, ST Mar. 94, p1016-1042.

The World's Longest Cable-stayed Foot-Bridge Using Fiber Reinforced Plastics, Magdi A. Khalifa and Maher K. Tadros, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p207-214.

Acoustic Emission Testing of Fiberglass Molded Grating, Kenneth Berg and J. Frank Mayfield, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p131-138.

Application of FRP Reinforcement in Structural Precast Concrete, T. Russell Gentry and Lawrence C. Bank, (In-frastructure: New Materials and Methods of Repair,

Kim D. Basham, ed., 1994), p575-582.

Design and Construction of Fiberglass Composite Building, Ed (Ahmed) Morsi and J. Larralde, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p751-757.

Development Length and Ultimate Strength of Fiberglass Pretensioned Beams, Mohsen A. Issa and Ahmed Amer, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p408-416.

Fiber-Glass Composite Aircraft Pad for Crop Dusting, Srinivasa L. Iyer, Vijayakumar Ranganathan and Terry Gross, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p743-750.

Flow Capacity of Rehabilitated Sanitary Sewers, Kenneth K. Kienow, Karl E. Kienow and Paul E. Kienow, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas

H. Wegener, ed., 1994), p28-42.

Graphite Prestressed Piles and Fiberglass Prestressed Pilecaps for U.S. Navy Pier at California, Srinivasa L. Iyer and Ramabhadran Sivakumar, (Infrastructure: New P. Packers ed Materials and Methods of Repair, Kim D. Basham, ed., 1994), p392-399.

Rehabilitation of Brick-Lined Railroad Tunnels to Achieve Increased Clearance, Bernard H. Voor, III, James Wm. Martin and Willie Benton, III, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p781-787.

Static Response of Fiberglass Pretensioned Beams, Rajan Sen, Mohsen Issa, Zeying Sun and Mohsen Shahawy, ST Jan. 94, p252-268.

Static Response of Fiberglass Pretensioned Columns, Mohsen Issa, Rajan Sen, Daniel Mariscal and Mohsen Shahawy, ST Dec. 94, p3634-3648.

Fiber Optic Chemical Sensors on Mars, M. A. Butler, A. J. Ricco, F. J. Grunthaner and A. L. Lane, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1345-

Fiber Wraps Migrate East, CE July 94, p11.

Glossary of Marine Fiber Rope Terms, Task Committee on Marine Fiber Rope of the Waterways, Port Coastal and Ocean Division of ASCE, (Bill Remley, chmn.), 1993,

0-87262-896-5, 80pp. Optical Waveguide Solar Energy System for Lunar Material Processing, Takashi Nakamura, Constance L. Senior, James M. Shoji and Robert D. Waldron, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1266-

The Performance of Unconfined Hollow Fiber Membranes as Pipe Flow and Mixed Flow Aerators, Drew W. Johnson and Michael J. Semmens, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and

Mare Edwards, ed., 1994), p106-113.

Wood Fiber Reinforced Cement Composites Under Wetting-Drying and Freezing-Thawing Cycles, Parviz Soroushian, Shashidhara Marikunte and Jong-Pil Won, MT Nov. 94, p595-611.

Field investigations

Analyzing Field Data for Hazen-Williams and Darcy-Weisbach Equations, Donald Clark, (Hydraulics of Pipe-lines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p1-9.

Behavior of Gravelly Soils During Seismic Conditions -An Overview, M. E. Hynes, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos

Dakoulas, ed., 1994), p117-120.

Cause of Deformed Shapes in Cooling Towers, Jean-François Jullien, Waeil Aflak and Yvan L'Huby, ST May 94, p1471-1488.

Contemporaneous Development of Field Data: Transportation Construction Claim Defense, Kenneth H. Dunne and George Navarrete, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2124-2135.

Durability of Concrete Materials Under Pavement Joints, Stephen R. Munoz and Eddie Y. J. Chou, (Infrastructure: New Materials and Methods of Repair, Kim D.

Basham, ed., 1994), p1-7.

Experimental Field Investigations of Small Delta Formation, Maria Mikhailova, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C.

Kraus, ed., 1994), p175-188.

Field and Prototype Measurements for Numerical Coastal Modelling, Hans-H. Dette, Jürgen Newe and Yongjun Wu, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p129-

Field Evaluation of Concrete Pavement Joint Sealants in Utah, Timothy D. Biel, Hosin Lee, Sherm Hopson and David Eixenberger, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p147-

Field Evaluation of the Sediment Transport Model "Stream" with a Bank Erosion Component, Deva K. Borah and Mona S. Dashputre, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p979-983.

Field Performance and Analysis of Steep Riprap, Guy Lefebvre, Karol Rohan, Mahrez Ben Belfadhel and Oscar Dascal, GT Sept. 92, p1431-1448.

Field Studies of Variability of Underwater Coastal Relief and Bed Sediment Composition During Storm, Ruben D. Kos'yan and Nicolay V. Pykhov, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholay C. Kostyan las C. Kraus, ed., 1994), p89-102. Hydraulics and Sediment Transport Processes in a Pool-

Riffle Rocky Mountain Stream, Douglas M. Thompson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p849.

Numerical Model of the Longshore Current on a Barred Beach, Jane McKee Smith, Magnus Larson and Nicholas C. Kraus, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994),

Planning, Assessing and Implementing Diagnostic Rehabil-itation Options, B. Jay Schrock, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p101-110.

Sandstone Materials Used as Riprap, Steven R. Abt, Mitchell R. Peters, Terry L. Johnson and Scott A. Hogan, (Hy-

draulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p467-471.

Size Characteristics of Debris Flow Deposition, Huilin Zhao and Yingyan Chen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p777.

Study for Deepening of the Martin Garcia Channels at Rio de la Plata, Uruguay, D. W. Yang and J. Bonasia, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1091-

1100.

Thresholds for Gravel and Cobble Motion, Katherine J. Chase, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p790-

Acoustic Emission Monitoring of Steel Bridges, A. K. Maji and T. Kratochvil, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1322-1327.

Advanced Continuum Traffic Flow Models for Congested Freeways, Anastasios S. Lyrintzis, Ping Yi, Panos G. Michalopoulos and Dimitrios E. Beskos, TE May/June

94, p461-477.

The Aeolus Project: Measuring Coastal Wind and Sediment Systems, D. J. Sherman, B. O. Bauer, R. W. G. Carter, D. Jackson, J. McCloskey, R. G. D. Davidson-Arnott, P. A. Gares, N. L. Jackson and K. F. Nordstrom, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p476-

Air Permeability from Pneumatic Tests in Oxidized Till, Kenneth B. Edwards and LaDon C. Jones, EE Mar/Apr.

94, p329-347.

Anomalous Dispersion Paradox in Shallow Water Gravity Waves Shoaling Over Slopping Bottom, S. Yu. Kuzne-Harves shouling Over Stopping Bottom, S. Tu. Kuzne-tsov and N. S. Speransky, (Ocean Wave Measurement and Analysis, Ovville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p364-373.
Applications of Field Testing to Bridge Evaluation, Fred Moses, Jean Paul Lebet and Rolf Bez, ST June 94, 91245 1526.

p1745-1762.

At-A-Site Mountain River Flow Resistance Variation, James C. Bathurst, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p682-686.

Behavior of Deeply Corrugated Steel Plate in Culvert, Alan F. Rauch, Shad M. Sargand and Glenn A. Hazen,

ST May 94, p1651-1655.

Bromide Transport under Sprinkler and Ponded Irrigation, M. Hamdi, D. Durnford and J. Loftis, IR Nov./Dec. 94,

p1086-1097.

Case History of a Collapsible Soil Fill, Alan L. Kropp, David J. McMahon and Sandra L. Houston, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1531-1542.

Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Mar-cel, ed. and Nicholas C. Kraus, ed., 1994, 0-7844-0043-

Comparison of Two Eductors for Sand Bypassing, Gregory L. Williams and James E. Clausner, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p875-884.

Computation of a flood event using a two dimensional finite element model and its comparison to field data, P. D. Bates, M. G. Anderson and J.-M. Hervouet, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p243-256.

Demonstration of Equipment for Dredging Contaminated Sediments at Buffalo River, Buffalo, New York, B. Thomas Kenna, Daniel E. Averett, Paul A. Zappi and Stephen M. Yaksich, (Dredging '94, E. Clark McNair,

Jr., ed., 1994), p885-895.

Developing Air Concentration and Velocity Probes for Measuring Highly-Acarded, High-Velocity Flow, Kathleen H. Frizell, David G. Ehler and Brent W. Mefford, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p268-277

Reflectometry, Charles H. Dowding and Fei-Chiu Huang, GT Aug. 94, p1413-1427.

Effects of Temperature and pH on Residual Aluminum in Alkaline-Treated Waters, John E. Van Benschoten, James N. Jensen and Md. A. Rahman, EE May/June 94,

Estimating Air Conductivity and Porosity from Vadose-Zone Pumping Tests, Joel W. Massmann and Mark Mad-den, EE Mar./Apr. 94, p313-328.

Fatigue-Reliability Evaluation of Steel Bridges, Zhengwei Zhao, Achintya Haldar and Florence L. Breen, Jr., ST

Zhao, Achiniya Haidar and Fiorence L. Breen, Jr., ST. May 94, p1608-1623.
A Field and Modeling Study of Residual Circulation in Sarasota Bay and Tampa Bay, Florida, Y. P. Sheng and S. J. Peene, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p641-655.
Field Evaluation of Plate Bearing Load Test on Payement

Field Evaluation of Plate Bearing Load Test on Pavement Soils in Florida, W. Virgil Ping and Ling Ge, (Infrastruc-ture: New Materials and Methods of Repair, Kim D.

Basham, ed., 1994), p231-238. Field Experiments for Wind Effects on Low Buildings, Kishor C. Mehta, Douglas A. Smith and Byron B. Yeatts, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1451-1456.

Field Measurements of Secondary Currents in Straight Riv-ers, Iehisa Nezu, Akihiro Tominaga and Hiroji Naka-

gawa, HY May 93, p598-614

Field Measurements of Tensile Forces on a Spherical Dome Sector Caused by Internal Load of a Granular Product in Storage, Jack L. Brunk, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p172-179.

Field Test of Buried Ocean-Wave Directional Spectrometer System, Tom Nye and Tokuo Yamamoto, WW Sept./

Oct. 94, p451-467.

Field Test of Stormwater Best Management Practices, S. L. Yu, S. L. Barnes, R. J. Kaighn, Jr. and S. L. Liao, (Criti-cal Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p508-515

Field Test of Thermal Precompression, Tuncer B. Edil and Patrick J. Fox, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1274-1286.

Field Tests of Railway Bridges, D. A. Foutch, D. H. Tobias and J. Choros, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1118-1123.

Field Tests on Small Marine Outfall, James J. Sharp, EE

Mar./Apr. 94, p471-477.

Field-Test Results of Aquifer Thermal Energy Storage at St. Paul, Minnesota, M. Hoyer, J. Hallgren, S. Eisenreich and R. Sterling, EY Aug. 94, p67-85.

Fine-Grained Sediment Transport in Pawtuxet River, Rhode Island, C. Kirk Ziegler and Bradley Nisbet, HY May 94, p561-576.

Improved Interpretation of Hvorslev Tests, Z. Demir and T. N. Narasimhan, HY Apr. 94, p477-494.

Inner Continental Shelf Transport Processes: The Middle Atlantic Bight, L. D. Wright, O. S. Madsen, T. A. Chis-holm and J. P. Xu. (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p867-878.

Laboratory and Field Demonstrations of Sediment Treatment Technologies by the USEPA's Assessment and Remediation of Contaminated Sediments (ARCS) Program, Stephen Garbaciak, Jr., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p567-578.

Laboratory and Field Evaluation of Acoustic Velocity Meters, Tracy Vermeyen, (Fundamentals and Advance-ments in Hydraulic Measurements and Experimentation,

Clifford A. Pugh, ed., 1994), p43-52. Laboratory and Field Leaching Tests on Coastal Salt-Bearing Soils, Nabil F. Ismael, GT Mar. 93, p453-470. Lateral Load Analysis of Single Piles and Drilled Shafts, J.

Michael Duncan, Leonard T. Evans, Jr. and Phillip S. K. Ooi, GT June 94, p1018-1033.

Nonlinear Finite Element Analysis of Deteriorated RC Slab Bridge, B. M. Shahrooz, I. K. Ho, A. E. Aktan, R. de Borst, J. Blaauwendraad, C. van der Veen, R. H. Iding and R. A. Miller, ST Feb. 94, p422-440.

The Nourtec Experiment of Terschelling: Process-Oriented Monitoring of a Shoreface Nourishment (1993-1996), P. Hoekstra, K. T. Houwman, A. Kroon, P. van Vessem and B. G. Ruessink, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p402-416. Numerical Modeling of Initial Ground Movement in an In-

strumented Superconducting Super Collider Shaft, David B. Spires, Fei Duan and Marek Mrugala, (Computing in Civil Engineering, Khalil Khozeimeh, ed.,

1994), p1990-1996.

Performance Evaluation of Offshore Breakwaters a Field and Computational Study, Andrew J. Chadwick, Chris-toper Fleming, Jonathan Simm and Geoffrey N. Bullock, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p950-961

Performance of Embankment Stabilized with Vertical Drains on Soft Clay, B. Indraratna, A. S. Balasubramani-

am and P. Ratnayake, GT Feb. 94, p257-273.

Phenomenological Studies of Two-Phase Flow Processes for Nuclear Waste Isolation, Karsten Pruess, Stefan Fin-sterle, Peter Persoff and Curt Oldenburg, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2639-2647.

Piezometer Performance at Wildlife Liquefaction Site, Cal-ifornia, T. Leslie Youd and Thomas L. Holzer, GT June

94, p975-995.

Prediction of Deep-Bed-Filter Performance Using Recursive Algorithms, C. S. P. Ojha and N. J. D. Graham, EE

July/Aug. 94, p961-971.

Preloading Organic Soils to Limit Future Settlements, K. Peter Yu and Rudolph P. Frizzi, (Vertical and Horizon-tal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p476-

Pretreatment of Secondary Effluent for Drip Irrigation, Massoud A. Tajrishy, David J. Hills and George Tcho-

banoglous, IR July/Aug. 94, p716-731.

Badiogenic Heavy Minerals as Tools in Selective Coastal Transport, R. J. de Meijer, I. C. Tánczos and C. Stapel, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p306-

Seismic Response Studies on a Two Span Slab-On-Girder Bridge, J. B. Mander, S. S. Chen, D-K. Kim and D. S. MacEwan, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p361-366. Shaft Performance in Taylor Marl—Field Measurements

vs. Numerical Modeling, David B. Spires, Fei Duan and Marek Mrugala, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p779-784.

Simulation of Wave and Beach Profile Change in SUPER-TANK Seawall Tests, William G. McDougal, Nicholas C. Kraus and Harman Ajiwibowo, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p278-295.

Spalling of Continuously Reinforced Concrete Pavements, Dan G. Zollinger, Sanjaya P. Senadheera and Tianxi

Tang, TE May/June 94, p394-411.

Structure of River Turbulence Behind Warm Water Discharge, Vladimir I. Nikora, Paweł Rowiński, Aleksander Suchodolov and Dariusz Krasuski, HY Feb. 94, p191-

Three-Dimensional Analysis of Flexible Circular Culverts, Ian D. Moore and Richard W. Brachman, GT Oct. 94, p1829-1844.

Tide- and Stormdriven Sediment Transport on the Inner-Shelf Along the Dutch Coast, Jan W. H. van de Meene and Leo C. van Rijn, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p822-836.

Turbulent Velocities in a Mountain River, Graeme M. Smart, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p844-

848

Uplift Capacity of Small-Diameter Drilled Shafts from In Situ Tests, Alan J. Lutenegger and Gerald A. Miller, GT

Aug. 94, p1362-1380.

The Use of By-Product Gypsum in Road Construction: a State-of-the-Art Summary, Ramzi Taha, Tom Pangajannakis, Roger Seals and Donald Saylak, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p170-177.

Validation of Coastal Morphodynamic Models with Field Data, Helen M. Wallace and Tim J. Chesher, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), pl 14-128.

Wave Impacts on Sea Walls and Breakwaters, A. R. Crawford, M. J. Walkden, P. A. D. Bird, G. N. Bullock, P. J. Hewson and J. Griffiths, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p656-670.

Wave Reflection: Field Measurements, Analysis and Theoretical Developments, Mark A. Davidson, Paul A. D. Bird, Geoff N. Bullock and David A. Huntley, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), 642-655.

Filament wound materials

Mechanistic Model of the Creep-Rupture Process in Filamentary Composites, Kerry T. Slattery, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p215-222.

Fills

Case History of a Collapsible Soil Fill, Alan L. Kropp, David J. McMahon and Sandra L. Houston, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1531-1542.

Consolidation Settlements and Pore Pressure Dissipation, Demetrious C. Koutsoftas and Raymond K. H. Cheung, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y.

Félio, ed., 1994), p1100-1110.

Deformation of Fill Slopes Caused by Wetting, Iraj Noorany, Joel A. Sweet and Ian M. Smith, (Stability and Performance of Slopes and Embankments II, Raymond B. Seed, ed. and Ross W. Boulanger, ed., 1992), p1244-1257.

Fire Resistance of Circular Steel Columns Filled with Bar-Reinforced Concrete, T. T. Lie, ST May 94, p1489-1509.

Interdependence of Beach Fill Volumes and Repetition Intervals, Hans-H. Dette, Alfred Fuehrboeter and Arved J. Raudkivi, WW Nov./Dec. 94, p580-593.

Lateral Foundation Deformations for a Marine Test Fill, Demetrious C. Koutsoftas, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), pl111-1123.

Performance of Fill that Contains Organic Matter, Robert W. Day, CF Nov. 94, p264-273.

Performance of Wick Drains Installed by Vibration, Richard P. Long, Leo F. Fontaine and Bruce Olmstead, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1193-1201.

Prospects of Vacuum-Assisted Consolidation for Ground Improvement of Coastal and Offshore Fills, S. Thevanayagam, E. Kavazanjian, Jr., A. Jacob and I. Juran, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed.,

1994), p90-105.

Review of Wetting-Induced Collapse in Compacted Soil, Evert C. Lawton, Richard J. Fragaszy and Mark D. Hetherington, GT Sept. 92, p1376-1394. The Role of Shale Pores in Settlement, Luis E. Vallejo, Mi-chael K. Robinson and Ann C. Stewart-Murphy, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1425-1436.

Settlement of Compacted Fills Caused by Wetting, Iraj Noorany and Jeffrey V. Stanley, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Felio, ed., 1994), p1516-

1530.

Settlement of Deep Compacted Fills in California, Ernesto E. Vicente, Gerald M. Diaz and Allen M. Yourman, Jr., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1124-1134.

Settlement of Test Fills for Chek Lap Kok Airport, Dominic O. Kwan Lo and Gholamreza Mesri, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1082-1099.

Shoreline Solution for Tapered Beach Fill, Todd L. Walton, Jr., WW Nov./Dec. 94, p651-655.

Strip Drains in Dredged Material Placement Areas, Timothy D. Stark and Jack Fowler, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p420-429.

Swell versus Saturation for Compacted Clay, Robert W.

Day, GT Aug. 92, p1272-1278.
"Dynamic Compaction Used as a Winter Construction Expedient", Lawrence F. Johnsen and Christopher Tonzi, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p68-79.

Filters

Design of Landfill Leachate-Collection Filters, George R. Koerner, Robert M. Koerner and Joseph P. Martin, GT Oct. 94, p1792-1803.

Design Relationship for Filters in Bed Protection, K. J. Bakker, H. J. Verheij and M. B. de Groot, HY Sept. 94, p1082-1088.

Factors Affecting Nitrite Buildup in Submerged Filter System, Oliver J. Hao and Jin M. Chen, EE Sept./Oct. 94, p1298-1307.

The Performance and Behaviour of Biological Filter Walls as Affected by Cyclical Temperature Changes, George L. England, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p57-76.

Performance Evaluation of Ceramic Filter Candles, Malay Chaudhuri, Sanjeev R. Verma and Anirban Gupta, EE

Nov./Dec. 94, p1646-1651.

Prediction of Deep-Bed-Filter Performance Using Recursive Algorithms, C. S. P. Ojha and N. J. D. Graham, EE July/Aug. 94, p961-971.

Sand Filter Backwast Pit Criticality Analysis, Hans Toffer and David G. Erickson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p907-912.

Filters, digital

Prediction of Structural Response to Large Earthquakes by Using Recordings From Smaller Earthquakes, Erdal Şafak, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1391-1396.

Filtration

Alternative Disinfectants for Drinking Water Treatment, Benjamin W. Lykins, Jr., Wayne E. Koffskey and Kathleen S. Patterson, EE July/Aug. 94, p745-758.

Arsenic Removal by Manganese Greensand Filters, Thon Phommavong and T. Viraraghavan, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p646-653.

Assessing Roughing Filtration Design Variables, Jennifer O. Cole, Catherine Westersund and M. Robin Collins, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p170-177.

DBP and Hardness Control by Membrane Filtration, Charles D. Turner and Srinivasa R. Kadubandi, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p344-351.

- Development of a Model for the ABF/AS Process, Julian Sandino and Ross E. McKinney, Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p686-693.
- Filtration and Backwashing Performance of Biologically-Active Filters, A. Amirtharajah, Rasheed Ahmad, A. Al-Shawwa and P. M. Huck, Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p178-185.
- Fouling of Nanofiltration Membranes by Natural Organic Matter, Francis A. DiGiano, Anne Braghetta, James Nilson and Bruce Utne, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p320-328.
- Modeling of Biofiltration of Natural Organic Matter in Drinking Water Treatment, Jack Z. Wang and R. Scott Summers, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p452-459.
- Ozonation as an Alternative to Mandatory Filtration, Dimitrios Katehis, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p384-391.
- Pilot Test on Groundwater Organics Removal by Low-Pressure Membranes, Paul Fu, Hector Ruiz, Ken Thompson and Carl Spangenberg, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p336-343.
- Prediction of Deep-Bed-Filter Performance Using Recursive Algorithms, C. S. P. Ojha and N. J. D. Graham, EE July/Aug. 94, p961-971.
- Pretreatment of Secondary Effluent for Drip Irrigation, Massoud A. Tajrishy, David J. Hills and George Tchobanoglous, IR July/Aug. 94, p716-731.
- The Relationship of Speciation to Iron and Manganese Removal Strategies, Kenneth Carlson, William Knocke and Kevin Gertig, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p66-73.
- Treatment of Drinking Water Containing Bromate and Bromide Ions, Taha F. Marhaba and Steven J. Medlar, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p476-483.
- Treatment of Oil in Water Emulsions by Ceramic-Supported Polymeric Membranes, Robert P. Castro, Yoram Cohen and Harold G. Monbouquette, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p82-89.
- Waste Minimization and Recycling by Microfiltration during Nitrocellulose Manufacturing, Lee Clapp, Jae K. Park and Byung J. Kim, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p98-105.

Finance

Civil Engineer Peirano, a Gold Miner's Great-Grandson, Endows Environmental Faculty Chair at Berkeley, NE Mar. 94, p16.

Financial analysis

- Cost-Schedule Integration for Cash-Flow Forecasting, Ronie Navon, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1536-1539.
- Equipment Management through Operational Failure Costs, Athanase I. Tsimberdonis and E. Lile Murphree, Jr., CO Sept. 94, p522-535.
- Negotiating Equity for Management of DOE Wastes, Sam A. Carmes, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), pl-8.
- Predicting Construction Contract Surety Bond Claims Using Contractor Financial Data, Gordon D. Severson, Jeffrey S. Russell and Edward J. Jaselskis, CO June 94, p405-420.
- What is the Market Value of Your Firm? William F. Peck, ME Mar./Apr. 94, p15-17.

Financial management

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- Austin's Strategy for Integrated Water Resource Planning, Tony T. Gregg, Maureen McReynolds and Eric Rothstein, (Revenue Enhancement for Water and Wastewater Systems, Jerry R. Rogers, ed. and William P. Bullock, Jr., ed., 1994), p1-7.
- Budgeting for Facility Repair and Maintenance, A. L. Barco, ME July/Aug. 94, p28-34.
- Congestion Pricing Just Another Ploy for Redistribution of Wealth (ltr), CE June 94, p36,38.
- Congress Tackles Thorny Superfund Issue, CE July 94, p98.
- Establishing Management Information Systems for Multiproject Programs, Russell Zapalac, Karen Kuemmler and Tim Malagon, ME Jan./Feb. 94, p37-42.
- The Implementation of a Comprehensive Water and Waste-water Utility Development Fee Process to Allocate the Cost of New Development to the Beneficiaries, Kenneth M. Needham and Joyce Kinnear, (Revenue Enhancement for Water and Wastewater Systems, Jerry R. Rogers, ed. and William P. Bullock, Ir., ed. 1994), n24-30.
- and William P. Bullock, Jr., ed., 1994), p24-30.

 A Primer for Financial Management of Small Consulting Firms, H. Edmund Bergeron, ME Mar./Apr. 94, p28-34.
- Revenue Enhancement for Water and Wastewater Systems, Jerry R. Rogers, ed. and William P. Bullock, Jr., ed., 1994, 0-7844-0030-X, 35pp.
- Software Expands User's Financial Data, CE Nov. 94, p86. U.S. Should Make Commitment to Community Colleges (ltr), CE July 94, p30.
- (III), C. B. July 34, 1930. Utilizing Coordinated Billing and Metering Systems Analysis to Enhance Utility Revenue on a Shared Revenue Basis, Randy P. Schuler, (Revenue Enhancement for Water and Wastewater Systems, Jerry R. Rogers, ed. and William P. Bullock, Jr., ed., 1994), p15-23.

Financial reports

For Fiscal Year 1993, ASCE Does Better Than Expected, CE Jan. 94, p74.

Financial responsibility

Global-Warming Debate Continues (ltr), CE July 94, p28-29.

Financing

- The Art of Infrastructure, Teresa Austin, CE Sept. 94, p40-43.
- A Bridge-Deck Deal Without Reinforcing Steel, ET Dec. 94/Jan. 95, p1,6.
- Clinton Seeks End to Unfunded Mandates, CE Mar. 94, p114.
- Congress to Debate Procurement Reform, NE Jan. 94, p2.
 Cost Considerations in Planning Pier Terminals, E. S. Dada
- and S. C. Wirasinghe, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p183-192.
- The Cost of Water Reuse is a Benefit to All, Richard W. Harris and Jacqueline A. Millet, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p706-709.
- Development of the Sheboygan Waterfront Sheboygan, Wisconsin, Robert Doyle, Fred A. Klancnik and Robert Petersen, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p552-561.
- Financing Construction and Operation Costs for Parks and Recreation Facilities, Richard Milbrodt, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p360-369.
- Future Concerns in Environmental Engineering Graduate Education, Richard G. Luthy, David A. Bella, James R. Hunt, James H. Johnson, Desmond F. Lawler, Charles R. O'Melia and Frederick G. Pohland, El Oct. 92, p361-
- Global-Warming Debate Continues (ltr), CE July 94, p28-
- Increasing Role of Privatization in Engineering and Construction, Janet K. Yates and Subhransu Mukherjee, ME Mar./Apr. 94, p57-65.
- NAFTA Spawns New Development Bank, WP Special issue 94, p2.

A Practical Application of Concession Schemes to Space Energy Projects, Michel Lyonnet du Moutier, (Engineering, Construction, and Operations in Space IV, Rodney Galloway, ed. and Stanley Lokaj, ed., 1994), p658-667.

Puerto Rico Privatizes the Roads, Jack S. Schnettler, CE Feb. 94, p56-58.

Quake Aid on the Way, CE Mar. 94, p114.

Roiled Waters: Water Politics in the 1990s, Teresa Austin, CE July 94, p49-51.

Sharing the Risk, Candace Port-Hull, WP Special issue 94, p14-19.

U.S. Should Make Commitment to Community Colleges (ltr), CE July 94, p30.

World Bank Charts a New Course for Water-Resources

Management, CE Jan. 94, p24-25. World Bank Update: In Deep Water, Francois M.I. Lam-pietti, WP Special issue 94, p26-30.

Finegrained soils

Banks, Glynn E. Michael P. Alexander and Allen Teeter, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p304-

Cracking and Fracture Behavior of Soil, Hsai-Yang Fang, (Fracture Mechanics Applied to Geotechnical Engineer ing, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p102-117.

Dredged Material Accumulation at a Dispersive Disposal Site, Mary Baker Wiley, Drew Carey, Thomas J. Fredette and W. F. Bohlen, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1172-1181.

Dynamic Compaction of Saturated Silt and Silty Sand - A Case History, Jean C. Dumas, Nelson F. Beaton and Jean-François Morel, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p80-89.

Fine-Grained Sediment Transport in Pawtuxet River, Rhode Island, C. Kirk Ziegler and Bradley Nisbet, HY

May 94, p561-576.

The Influence of Fines Type and Content on Cyclic Strength, Joseph Patrick Koester, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p17-33.

Prospects of Vacuum-Assisted Consolidation for Ground Improvement of Coastal and Offshore Fills, S. Thevanayagam, E. Kavazanjian, Jr., A. Jacob and I. Juran, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p90-105.

Research on the Consolidation of Mud, Erik Toorman and Marc Sas, (Dredging '94, E. Clark McNair, Jr., ed.,

1994), p430-439.

Resilient Modulus for Fine-Grained Subgrade Soils, Dingqing Li and Ernest T. Selig, GT June 94, p939-957.

Strip Drains in Dredged Material Placement Areas, Timo-thy D. Stark and Jack Fowler, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p420-429.

Finite difference method

Computation Method for Regulating Unsteady Flow in Open Channels, Fubo Liu, Jan Feyen and Jean Berlamont, IR Sept./Oct. 92, p674-689.

Large Deformation Analysis of Plates on Unilateral Elastic Foundation, A. A. Khathlan, EM Aug. 94, p1820-1827. Mathematical Modeling of Saturated-Unsaturated Flow to

Drains, Saleem Ahmad, Deepak Kashyap and B. S. Mathur, IR Jan./Feb. 93, p18-33.

Nonlinear Hydrodynamic Pressures on Arch Dam Faces, Bang-Fuh Chen and Ing-Sen Yuan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p411-415.

The Significance of Hydrodynamic Forces in Coastal Embankment Design, Bang-Fuh Chen, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p880-889.

Thermal Effects on Massive Concrete Pours, Toorak Zokaie and Timothy A. Osterkamp, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p27-34.

Turbulent Boundary Layer Over Flat Plate with Rigid and Flexible Surfaces, M. S. Abu Sharekh, S. K. Pathak, G. L. Asawa and P. D. Porey, EM Aug. 94, p1675-1695.

Finite differences

An Attempt of an Aquifer Model with Lack of Data, Octavio Cabezut-Boo, Ricardo Anza and Luis Tubilla, (Hyvio Cabezut-Boo, Ricardo Anza and Lius Tubilla, (Hydraulic Engineering) '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p312-316.
Modeling 3-D Ground Water Mounding, Tswn-Syau Tsay, John Hoopes, Salwa Rashad and Yahia Majali, (Hydraulic Engineering) '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p317-321.

Numerical Experiments on Instability in Unsteady Flow Modeling, Chin-lien Yen and Ming-hsi Hsu, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1275-1279.

An Overview of the Analysis and Design Techniques Used on the Main Tunnels of the SSC, Steven H. Baldauf, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1967-1974.

Physical-Based Numerical Model of Inclined Starting Plumes, Juichiro Akiyama, Masaru Ura and Wei Wang, HY Oct. 94, p1139-1158.

Two-Dimensional Simulation of Basin Irrigation. I: Theory, E. Playán, W. R. Walker and G. P. Merkley, IR Sept./Oct. 94, p837-856.

Two-Dimensional Simulation of Basin Irrigation. II: Applications, E. Playán, W. R. Walker and G. P. Merkley, IR

Sept./Oct. 94, p857-870.

Two-Dimensional Water Flood and Mudflow Simulation, J. S. O'Brien, P. Y. Julien and W. T. Fullerton, HY Feb. 93, p244-261.

Verification of A 1-Dimensional Model for Predicting Shallow Infiltration at Yucca Mountain, Joseph A. Hevesi, Alan L. Flint and Lorraine E. Flint, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2323-2332.

Finite element analysis

Bridge Gets Analysis, Less Likely to Crack, CE July 94, p78.

Finite element method

2D Finite Element Modelling of Flooding Due to River Bank Collapse, L. D'Alpaos, A. Defina and B. Matticchio, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p60-71.

3D model verification for a groyne and harbor experiment, P. Mewis and K. -P. Holz, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p905-909.

Accurate Estimation of Interface Shear Stresses in Com-posite Masonry Walls, Subhash C. Anand and M. Ayubur Rahman, ST Mar. 94, p998-1015.

Algorithm for Hysteresis Analysis of Prestressed-Concrete Frames, Xiaozu Su and Bolong Zhu, ST June 94, p1732-1744.

Analysis of Composite Panels Using Newton's Method, Norman F. Knight, Jr., (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p147-155.

Analysis of Deep Excavation in Boston, Andrew J. Whittle, Youssef M. A. Hashash and Robert V. Whitman, GT Jan.

Analysis of Foundation Settlement Due to Earthquake, Jian Zhou and Jian Du, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p798-805.

Analysis of I-Girder Highway Bridges, Kassim M. Tarhini, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p684-687.

Analysis of Port Allen Lock in Elastic-Plastic Soil Media Hsi Chi Yang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p865-872.

Application of OOP in Developing Finite Elemen' Analysis
Programs Using C++, Jianing Ju and M. U. Hosain,
(Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p1916-1919.

Application of the FESWMS-2DH Software to Solve the Navigation Problem at EL-Menya Bridge in Egypt, Khaled Kheireldin, Ahmed Fahmey and Mohamed Gasser, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1244-1250.

Application of the "Diflupress L.D." Field Test to Settle-ment Calculation, C. Leidwanger, E. Flavigny, R. Chambon, J. L. Giafferi, P. Catel and G. Bufi, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1312-1324.

Applications of Viscoelastic Dampers to High-Rise Build-

ings, C. S. Tsai and H. H. Lee, ST Apr. 93, p1222-1233.
ASA.WAVES: An Interactive PC-based Wave Forecasting Tool, Stéphan T. Grilli, T. Opishinski, M. L. Spaulding and T. Isaji, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p890-904.

An Assessment of the Joint Factor as Used in the Modified MEXE Method, N. G. Gong and B. S. Choo, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p704-711

Asymmetric Flow into Well by Finite Elements, Kamala K. Singh and Shambhu P. Dasgupta, IR May/June 94,

p520-533.

Atmospheric Transport Prediction Using an Adaptive Finite Element Method, Darrell W. Pepper and Ashley F. Emery, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1946-1952.

An Automated Environment for Parallel Computing, E. D. Sotelino, D. W. White and W. F. Chen, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p193-202. Bar Yield Penetration in Monotonically Loaded An-

chorages, John F. Bonacci, ST Mar. 94, p965-986. Bearing Capacity of Rectangular Footings on Geogrid-Reinforced Sand, Temel Yetimoglu, Jonathan T. H. Wu and Ahmet Saglamer, GT Dec. 94, p2083-2099. Behavior of Two-Span Continuous Bridge Under Truck

Axle Loading, Jane L. Tiedeman, Pedro Albrecht and

Lloyd R. Cayes, ST Apr. 93, p1234-1250.
Bolted Connections for GFRP Laminated Structural Members, Nahla K. Hassan, Charles N. Rosner and Sami H. Rizkalla, (Infrastructure: New Materials and Methods of

Rizkalai, (infrastructure: New Materials and Meinoas of Repair, Kim D. Basham, ed., 1994), 1018-1025. BRICAL: A Multimedia Intelligent Educational System for Bridge Engineering, Amin Hammad and Yoshito Itoh, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p1671-1678.

Buckle Propagation: Steady-State Finite-Element Analysis, André C. Nogueira and John L. Tassoulas, EM Sept. 94, p1931-1944.

Computation of a flood event using a two dimensional ite element model and its comparison to field data, P. D. Bates, M. G. Anderson and J. -M. Hervouet, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p243-256.

A Control Volume Finite Element Method for the Solution of 2-D Overland Flow Problems, P. Di Giammarco and E. Todini, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p82-101. Crack Detection in Beams - Sensitivity Studies, Lidvin

Kjerengtroen and Christopher Jenkins, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham,

ed., 1994, p483-490.

Damage Evaluation of Building on Piers in Expansive Clay, Richard J. Finno, Gary J. Klein and Paul J. Sabatini, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1482-1493.

Damage Prediction in Reinforced Concrete Structures under Cyclic Loading, B. Garstka, W. B. Krätzig and F. Stangenberg, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U.

Penalba, ed., 1994), p280-289.

Deformation of Fill Slopes Caused by Wetting, Iraj Noorany, Joel A. Sweet and Ian M. Smith, (Stability and Performance of Slopes and Embankments II, Raymond B. Seed, ed. and Ross W. Boulanger, ed., 1992), p1244-1257.

Design for Durability for Large Reinforced Concrete Shells, Wilfried B. Krätzig, Konstantin Meskouris and Karsten Gruber, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p897-906.

Destructive Testing of Decommissioned Concrete Slab Bridge, R. A. Miller, A. E. Aktan and B. M. Shahrooz, ST July 94, p2176-2198

Determining Bituminous Pavement Shear Modulus, John E. Haddock and Thomas D. White, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed.,

1994), p788-795.

Dynamic Simulation of Tractor-Trailer-Cask System Used in Nuclear Waste Transportation, Zekai Ceylan and Cahit Evrensel, (High Level Radioactive Waste Manage-ment, High Level Radioactive Waste Program Committee, 1994), p934-941.

tee, 1994), p934-941.
Effective Width of Locally Buckled Plates in Compression and Bending, Tsutomu Usami, ST May 93, p1358-1373.
Efficient Nonlinear Analysis of Column-Supported Cylinderical Shells, P. L. Gould, R. V. Ravichandran and S. Sridharan, (Spatial, Lattice and Tension Structure) tures, John F. Abel, ed., John W. Leonard, ed. and Celina

U. Penalba, ed., 1994), p927-935.

Estimating Basal-Heave Stability for Braced Excavations in Soft Clay, A. T. C. Goh, GT Aug. 94, p1430-1436.

Experimental and Numerical Studies of Composite Beams

Exposed to Fire, Dietmar Hosser, Thomas Dorn and Osama El-Nesr, ST Oct. 94, p2871-2892.

Experimental Evaluation and Finite Element Analysis of Masonry-Infilled R/C Frames, P. B. Shing, A. B. Mehra-bi, M. Schuller and J. L. Noland, (Analysis and Compu-

tation, Franklin Y. Cheng, ed., 1994), p84-93.

Extensions of Finite Element Dental Stress Analysis,
Robert E. Efimba and E. M. Ahmed, (Computing in Civil
Engineering, Khalil Khozeimeh, ed., 1994), p1928-

1935

FEM in a Design Code Environment, Philip V. DeSantis and James E. Wild, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p454-461. Finite Element Algorithms for Modelling Flood Propaga-

tion, J.-M. Hervouet and J.-M. Janin, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Mol-

rionaro, ed. and Luigi Natale, ed., 1994), p102-113.
Finite Element Analysis of Shear in RC Girders, Pascal Casanova, Merret Fliedner, Pierre Rossi and Franz-Josef Ulm, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p223-229.

Finite Element Analysis of Thin-Walled Curved Beams Made of Composites, G. S. Palani and Sundaramoorthy Rajasekaran, ST Aug. 92, p2039-2062. Finite Element-Based Flutter Analysis of Cable-Suspended Bridges, Ahmad Namini, Pedro Albrecht and Harold Booch, ST June 09 -1509-1526.

Bosch, ST June 92, p1509-1526. Finite-Element Calculations on Alliant FX/80, Brian C.

Watson and Manohar P. Kamat, AS Oct. 94, p446-462. Finite-Element Modeling of Deformation and Cracking in Early-Age Concrete, René de Borst and A. H. van den

Boogaard, EM Dec. 94, p2519-2534. Finite-Element Simulation of Ice-Sheet Indentation, H. A.

Khoo and T. M. Hrudey, EM June 94, p1322-1342.

A Flexible Structural Analysis Method for Computer-Aided Preliminary Design, Fang Zhao and Xiaogang Zeng, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1294-1301.

Footing Load Tests on Sand, Kenneth Tand, Erik Funegard and Pickett Warden, (Vertical and Horizontal Deforma-

and recent water, (vertical and trottomal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y, Félio, ed., 1994), p164-178. Fortification of MMOC Models for Steep-Channel Flows, Chintu Lai, Der-Liang Young and Jen-Ter Chang, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1290-1294.
Fracture Analysis of Bolted Timber Connections, Ian Scribt and Fig. L M. (Structure Connections, Ian

Smith and Lin J. Hu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p912-917.

Fracture Mechanics and Plasticity in Saturated Clay, Adel S. Saada, Liqun Liang and Gary F. Bianchini, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p21-39. Gateway to Columbus, John Hillman and Daniel K. Bur-

roughs, CE Dec. 94, p58-61.

Geocell Mattress Effects on Embankment Settlements, Mark D. Evans, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p584-597.

Horizontal and Vertical Movements of Bridge Piers Subjected to Ship Impact, Naresh C. Samtani, Jaw-Nan Wang, Frank Pepe, Jr. and Michael J. Abrahams, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p245-256.

hp Version of Finite-Element Mixed Method, Michelle M.

Crull and P. K. Basu, EM Nov. 94, p2342-2360.

Hybrid Finite Element/Discrete Element Model for Large Deformation Geotechnical Engineering Problems, Isao Ishibashi, Tarun K. Agarwal and You Wang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p857-864.

hybrid Structural Control for Seismic Safety, Michael A. Riley, Haluk Aktan, Satish Nagarajatah and Andrei M. Reinhorn, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p307-316.

Improving Dynamic Finite Element Models Using Test Data, N. S. Khot and D. E. Veley, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p18-26.

Inelastic Bending and Torsion of Steel I-Beams, Yong Lin

Pi and N. S. Trahair, ST Dec. 94, p3397-3417. Influence of Spatially Random Soil Stiffness on Foundation Settlements, Geoffrey M. Paice, D. V. Griffiths and Gordon A. Fenton, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p628-639.

Instability of Tapered Thin-Walled Beams of Generic Sec-

Sundaramoorthy Rajasekaran, EM Aug. 94, p1630-1640.

Interface Model Applied to Fracture of Masonry Struc-tures, Hamid R. Lotfi and P. Benson Shing, ST Jan. 94, Interface Shear Stress in Overlaid Concrete Pavements, C.

M. Lau, T. F. Fwa and P. Paramasivam, TE Mar./Apr. 94, p163-177.

Investigation of Faulted Tunnel Models by Combined Photoelasticity and Finite Element Analysis, Samaan G. Lad-kany and Yuping Huang, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1979-1986.

Investigation of Stress in a Circular Tunnel Due to Overburden and Thermal Loading of Horizontally Placed 21 PWR Multi Purpose Canisters, Nadia Kandalaft-Ladkany and Richard V. Wyman, (High Level Radioac-tive Waste Management, High Level Radioactive Waste Program Committee, 1994), p860-867.

Large Deflection of Imperfect Plates by Iterative Be-Fe Method, Jianqiao Ye, EM Mar. 94, p431-444.

Late Stage Damage in G30-500/PMR-15 Laminates, Wieslaw K. Binienda, Anping Hong, Andrew Gyekenyesi and John Hemann, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p316-325.

Limit Analysis and Optimal Design of Plates with Equilibrium Elements, S. Krenk, L. Damkilde and O. Høyer, EM June 94, p1237-1254.

Load Settlement curve Method for Spread Footings of Sand, Jean-Louis Briaud and Philippe Jeanjean, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1774-1804.

Load-Carrying Mechanism of Restrained Plates at Large Deflections, Zhiliang Fan, EM June 94, p1388-1391.

Mechanical Behavior of Metal Contact Joint, Shigeru Kuranishi, Futamia Naganuma, Masatoshi Nakazawa and Tetsuo Iwakuma, ST July 94, p1977-1990.

Mesh Generation for Estuarine Flow Modeling, Norman L. Jones and David R. Richards, WW Nov./Dec. 92, p599-

Model-Correction-Factor Method in Structural Reliability, Ove Ditlevsen and Torben Ambjerg-Nielsen, EM Jan. 94, p1-10.

Modeling 3D Ground-Water Flow by Modified Finite-Element Method, Fang Xin Yu and Vijay P. Singh, IR Sept./Oct. 94, p892-909

Modeling of Infiltration from Trenches for Storm-Water Control, Michael Duchene, Edward A. McBean and Neil R. Thomson, WR May/June 94, p276-293.

MPC Closure Weld Model Study, Brain J. Kruse, Joe B. Stringer and Giles G. Childress. (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p435-443.

A Multi-Dimensional Transport Model Utilizing a Charac-Multi-Dimensional Transport Model Utilizing a Characteristic-Galerkin Approach, John F. DeGeorge and Ian P. King, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p407-421.

A New LAX-WENDROFF Algorithm to Solve the Bed Continuity Equation With Slope Effect, Jean-Michel Tanguy, Bainian Zhang and Luc Hamm, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p134-148.

Nonlinear Buckling Response of Single Layer Latticed Barrel Vaults, Seishi Yamada and Takashi Taguchi, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed.,

1994), p519-528.

Nonlinear Finite Element Analysis of Concrete Deep Beams, A. Fafitis and Y. H. Won, ST Apr. 94, p1202-

Nonlinear Finite-Element Model for Light-Frame Stud Walls, B. Kasal and R. J. Leichti, ST Nov. 92, p3122-3135

Nonlinear Finite-Element Model of Complete Light-Frame Wood Structures, Bohumil Kasal, Robert J. Leichti and Rafik Y. Itani, ST Jan. 94, p100-119.

Nonlocal Damage Theory Based on Micromechanics of Crack Interactions, Zdeněk P. Bažant, EM Mar. 94. p593-617

Numerical Model Verification on Tidal Current in Tokyo Bay, Yoshitaka Fukui, Toshio Kodama and Mutsuto Kawahara, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p880-

Numerical Modeling of Bridge Approach Settlement with Foundation-Embankment Interaction, Musharraf Zaman, Dinesh Bhat and Joakim Laguros, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1400-1414.

Numerical Simulation of Site Effects, Papageorgiou, (Structures Congress XII, N. C. Baker,

ed. and Barry J. Loodno, ed., 1994), p567-572. Numerical Study of Underpinning by Piles for Settlement Control of Strip Foundations, M. Makarchian and H.G. Poulos, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p303-313.

Old Concrete Slab Bridges. II: Analysis, A. Azizinamini, Y. Shekar, T. E. Boothby and G. Barnhill, ST Nov. 94,

p3305-3319.

Orthogonal Series Expansions of Random Fields in Reliability Analysis, Jun Zhang and Bruce Ellingwood, EM Dec. 94, p2660-2677

Parameters Affecting Distortional Buckling of Tapered Steel Members, Hamid Reza Ronagh and Mark Andrew Bradford, ST Nov. 94, p3137-3155.

Peak Load Determination in Linear Fictitious Crack Model, Yuan N. Li and Robert Y. Liang, EM Feb. 94,

Performance and Analysis of Frames With "URM" Infills, Khalid M. Mosalam, Peter Gergely and Richard N. White, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p57-66.

Performance of Oil Storage Tanks on Vibroflotation Improved Hydraulic Fill in the Port of Tampa, Florida, Fintan J. Buggy, Ramon E. Martinez, James D. Hussin and Richard J. Deschamps, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p548-560.

Permanent Deformation on Preexisting Sliding Surfaces in Dams, George Gazetas and Nasim Uddin, GT Nov. 94, p2041-2061.

Postbuckling of Moderately Thick Circular Plates With Edge Elastic Restraint, G. Venkateswara Rao, N. Ra-jasekhara Naidu and K. Kanaka Raju, EM Oct. 94, p2232-2238.

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Predicted Behavior of Two Centrifugal Model Soil Walls, See Keung Ho and R. Kerry Rowe, GT Oct. 94, p1845-

Prediction of Ground Deformations Due to Excavation-Application to Tunnel Lining Design in Weak Rock, Wern-ping Chen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1997-2005.

Ranking Ground-water Management Alternatives by Mul-ticriterion Analysis, Lucien Duckstein, Wiktor Treichel

and Samir El Magnouni, WR July/Aug. 94, p546-565.
Reduction of Settlements Using Soil Reinforcement, M. Sherif Abdel-Baki and G. P. Raymond, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p525-537.

Regularized Method in Limit Analysis, Gong-Liang Jiang,

EM June 94, p1179-1197.

Reinforced-Concrete Dimensioning Based on Element Nodal Forces, E. Anderheggen, Z. Despot, P. Steffen and S. M. R. Tabatabai, ST June 94, p1718-1731

Rotating Crack Model and Fracture in a R/C Medium, Azadeh Parvin and Theodore G. Toridis, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1944-1950.

Seismic Analysis of Reinforced Concrete Building Using Finite-element Techniques, Tom Panayotido and Jayant Vir, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1091-1098.

Sensitivity-Based Weighted-Average in Structural Damage Assessment, P. C. Pandey and S. V. Barai, CF Nov. 94,

Settlement Analysis of Landfill Liners over Deep Mined Areas, M. Gabr, J. J. Bowders and D. T. Mooney, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p436-450.

Settlement of Test Footings: Predictions from the University of New Mexico, Koon Meng Chua, Ling Xu, Eric Pease and Sameer Tamare, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p240-

A Shape-Finding Finite Element Analysis for an Equally-Stressed Surface in Membrane Structures, T. J. Kwun, S. Y. Sur and H. W. Cho, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p724-731.

Shear-Stress Distribution in Symmetrically Tapered Cantilever Beam, Edwin P. Russo and Gregory Garic, ST Nov. 92, p3243-3249.

Spalling of Continuously Reinforced Concrete Pavements, Dan G. Zollinger, Sanjaya P. Senadheera and Tianxi Tang, TE May/June 94, p394-411.

Spread Footing Predictions, Kuo-Hsia Chang, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens. ed., 1994), p157-159.

Steel-Deck-Reinforced Concrete Diaphragms. II, W. Samuel Easterling and Max L. Porter, ST Feb. 94,

p577-596.

Stress and Settlement of Footings in Sand, Bengt H. Fellenius and Ameir Altaee, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1760-1773.

Stress-Deformation Behavior of an Embankment on Boston Blue Clay, Charles C. Ladd, Andrew J. Whittle and Dante E. Legaspi, Jr., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1730-1759.

Study on Reinforced Concrete Cylindrical Shells with tady on Reinforced Concrete Cyffindrical Sheins Will Edge Members under Impact Loading, Kazuhiko Mashi-ta, Hidehiro Yoshitake, Masaya Noguchi and Masatoshi Hotta, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p847-856.

Study on Structural Characteristics of Air-Inflated Beam Structures, Masaya Kawabata and Kazuo Ishii, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994),

p742-751.

Subsurface Transport Modeling of the Savannah River and Yucca Mountain Sites, Bryan E. Dunlap, Darrell W. Pepper and Dale E. Stephenson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1848-1853.

Surface Subsidence Prediction by Nonlinear Finite-Element Analysis, Yacoub Najjar and Musharraf Zaman,

GT Nov. 93, p1790-1804.

Testing and Predicting the Movement of a Drilled Shaft in New Mexico, Koon Meng Chua, Wimpie A.N. Aspar and Robert Meyers, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p279-290.

Thermal Effects on Massive Concrete Pours, Toorak Zokaie and Timothy A. Osterkamp, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed.,

1994), p27-34.

Thermal Finite Element Analyses of 26 Waste Package Spent Nuclear Fuel Loading Configurations, A. O. Thompson and M. J. Plinski, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p796-800.

Three Dimensional Simulation of Progressive Tunneling Process for Lining Design of Intersecting Tunnels in Soft Rock, Liqiu (Lichu) Guan, Steven H. Baldauf and Wern-Ping (Nick) Chen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2006-2013.

Transactional Support for Concurrent Finite Element Analysis & Design, Sanjai Tiwari and H. R. Riggs, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

UF Spread Footing Prediction, F. C. Townsend, P. Ruesta and R. Morgan, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p182-185.

Vertical Displacement Induced in Soil by Conical Shell Foundations, Mohamed Abdel-Rahman and Adel Hanna, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p937-948.

Viscoplastic Response of Structures for Intense Local Heating, Earl A. Thornton and J. D. Kolenski, AS Jan. 94, p50-71.

What Controls the Ultimate Load of a Glulam Dome? S. M. Holzer, S. A. Kavi, S. Tongtoe and J. D. Dolan, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p86-96.

When is Finite Element Analysis Appropriate? Darrell D. Barker and James Weeks, CC Mar. 94, p1,12-15.

A 2D numerical simulation of the Po river delta flow, D. Ambrosi, S. Corti, V. Pennati and F. Saleri, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p18-29.

3-D Dynamic Analysis of the Brent-Spence Through-Truss Bridge, I. E. Harik, D. L. Allen, R. L. Street, M. Guo, R. C. Graves, J. Harison and M. J. Gawry, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1112-1117.

3D Simulation of End-Plate Bolted Connections, Archibald N. Sherbourne and Mohammed R. Bahaari, ST Nov. 94,

p3122-3136.

An Adaptive Nine-Point Finite Volume Roe Scheme for Two-Dimensional Saint-Venant Equations, Fayssal Benkhaldoun and Luc Monthe, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p30-44.

Adaptive Numerical Methods for Transport Dominated Processes, Alfio Quarteroni, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and

Luigi Natale, ed., 1994), p114-126.

Allowable Design Loads for Marman Clamp Systems, Robert DiTolla and Michael Ernst, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p217-226.

Analysis of Arch Dams, Alexander Michael Ansah, ST May 93, p1516-1538.

Analysis of Earthquake Fault Rupture Propagation through Cohesive Soil, Jonathan D. Bray, Raymond B. Seed and

H. Bolton Seed, GT Mar. 94, p562-580.

H. Bolton Seed, Cl Mar. 94, po2c-280.
Analysis of Glulam-FRP Beams by a Layer-Wise Formula-tion, Julio F. Davalos, Youngchan Kim and Somnath S. Sonti, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p67-75.
Analysis of Stone Columns Foundation for Storage Tark

Analysis of Stone Columns Foundation for Storage Tank by FEM, P. K. Kundu, K. G. Sharma and A. Nanda, (Vertical and Horizontal Deformations of Foundations

and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p701-710.

Analysis of Unstiffened and Stiffened Tubular Members Under External Pressure and Structural Loads, Spyros A. Karamanos and John L. Tassoulas, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1520-1525.

ATLSS Connections with Moment Capacity, Richard B. Garlock, Le-Wu Lu and B. Vincent Viscomi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p743-748.

Boundary Conditions and Flow Patterns in a Mountain River, Andrew J. Miller, Diane M. L. Mas, James A. Smith and Wei-Hao Chung, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p762-766.

Buckling Strength of Wood Power Poles Using Finite Elements, A. B. Peabody and J. W. Wekezer, ST June 94,

Case Studies: Clay Cover Cracking Analysis Using FEM Techniques, Robert Y. Liang, John C. Lommler, Suckhong Lee and Bob Meyers, (Fracture Mechanics Ap-

nong Lee and Dob Meyers, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p86-101.

COAST Educational Program for Teaching Structural Analysis, Czeslaw J. Branicki and Jerzy W. Wekezer, (Structures Congress XII, N. C. Baker, ed. and Barry J. Leeden ed. 1004, 2327-332

Loodno, ed., 1994), p327-332.

Comment on Global/Local Method for Low-Velocity Impact Problems, Minggang Zhou and William P. Schon-berg, EM May 94, p1042-1056.

Comparison of Donnell and Higher Order Nonlinear Models for Dynamically Loaded Composite Plates and Shells, Arthur E. Forral and Anthony N. Palazotto, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p99-108.

Composite Beam Element with Layerwise Plane Sections, Youngchan Kim, Julio F. Davalos and Ever J. Barbero,

EM May 94, p1160-1166.

Compression Response of Cracked Reinforced Concrete, F. J. Vecchio and M. P. Collins, ST Dec. 93, p3590pression-Member Models for Space Trusses: Review,

Erling Murtha-Smith, ST Aug. 94, p2399-2407. Cone-Cylinder Intersection under Pressure: Axisymmetric

Cone-Cylinder Intersection under Pressure: Axisynmieric Failure, Jin-Guang Teng, EM Sept. 94, p1896-1912. The Development of an Expert System Used in Preliminary Design of Concrete Bridges, Nicolaas Stuurstraat and Comelis van der Veen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p909-912.

Different Approaches to Rating Slab Bridges, Vikas Huria, Kuo-Liang Lee and Ahmet E. Aktan, ST Oct. 94, p3056-3062.

Dynamic Model for Analysis of Concrete Pavements, Karim Chatti, John Lysmer and Carl L. Monismith, (Structures Congress XII, N. C. Baker, ed. and Barry J. Lood-

no, ed., 1994), p984-989. Effectiveness of Storm Shutters in Hurricane Damage Prevention, Raja R. A. Issa, Camille A. Issa, Ajay Shanker and Paul Gencorelli, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A.

Cook, ed. and Mehrdad Sotani, ed., 1994), p486-495. Element-Level System Identification with Unknown Input, Duan Wang and Achintya Haldar, EM Jan. 94, p159-

Estimation of Field Site Flow Parameters, Yahia Majali, Salwa Rashad, John Hoopes and Tswn-Syau Tsay, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p303-307. Externally Stiffened I-Beam to Box-Column Connections. N. E. Shanmugam, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p719-724.

Finite Element Limit Load Analysis by the Static Approach Using Nonlinear Programming, Hichem Smaoui, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1936-1943.

Finite Element Method for Buckling Analysis of Plate Structures, Chee-Kiong Chin, Faris G. A. Al-Bermani and Sritawat Kitipornchai, ST Apr. 93, p1048-1068.

Finite Element Modeling of Concrete Expansion and Confinement, F. J. Vecchio, ST Sept. 92, p2390-2406.

Finite Element Modeling of Continuous Posttensioned Voided Slab Bridges, Rajan Sen, Mohsen Issa, Xianghong Sun and Antoine Gerges, ST Feb. 94, p651-

Finite-Element Analysis of Elastoplastic Discontinuities, Paul Steinmann and Kaspar Willam, EM Nov. 94, p2428-2442.

Finite-Element Volumes, Thomas G. Davis, SU Aug. 94, p94-114. Finite-Volume Two-Dimensional Unsteady-FLow Model for River Basins, D. H. Zhao, H. W. Shen, G. Q. Tabios,

III, J. S. Lai and W. Y. Tan, HY July 94, p863-883. Fracture Mechanics Analysis of Welded Joints Using Boundary/Finite Element Alternating Methods, Ruijia Mu and D. V. Reddy, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1920-1927.

Galerkin Sampling Method for Stochastic Mechanics Problems, P. D. Spanos and B. A. Zeldin, EM May 94,

p1091-1106.

Generating Reinforcement in FE Modeling of Concrete Structures, Fariborz Barzegar and Srinivas Maddipudi, ST May 94, p1656-1662.

Hydrodynamic Modeling of San Diego Bay, Parmeshwar L. Shrestha, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p140-

Hyperbolic Stress-Strain Parameters for Silts, Timothy D. Stark, Robert M. Ebeling and Joseph J. Vettel, GT Feb. 94, p420-441.

Impulse Effect on Redundancy of a Tied-Arch Bridge, Leon L-Y. Lai, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p712-719.

Inverse Reliability Problem, Armen Der Kiureghian, Yan Zhang and Chun-Ching Li, EM May 94, p1154-1159.

Large Deformation Analysis of Lattice Truss Structures Including Hysteretic Material Behavior, Nayla Khattar, George E. Blandford and Shien T. Wang, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p499-

Large-Scale Computations in Analysis of Structures, D. B. McCallen and G. L. Goudreau, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p183-192.

Modelling of Extended Endplate Bolted Connections, Mohammed R. Bahaari and Archibald N. Sherbourne, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p731-736.

Nonlinear Analysis of a Reinforced Concrete Folded Plate Structure, Pattabhi Sitaram, Stuart Swartz and Chidambaram Channakeshava, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p857-866.

Nonlinear Analysis of Angle-Ply Composite and Sandwich Laminates, T. Kant and J. R. Kommineni, AS July 94,

p342-352.

Nonlinear Analysis of Prestressed Concrete Structures, Mohd-Hisham Mohd-Yassin and Filip C. Filippou, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1421-1426.

Nonlinear Behavior of Northlight Reinforced Concrete Shells, P. Srinivasa Rao and S. Duraiswamy, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p837-846.

Nonlinear Finite Deformation Analysis of Beams and Columns, Ronald Y. S. Pak and Eric J. Stauffer, EM Oct. 94,

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Nonlinear Finite Element Analysis of Deteriorated RC Slab offinical Pinite Scientific Analysis of Detertorlated RC State Bridge, B. M. Shahrooz, I. K. Ho, A. E. Aktan, R. de Borst, J. Blaauwendraad, C. van der Veen, R. H. Iding and R. A. Miller, ST Feb. 94, p422-440.

Nonlinear Finite Element Analysis of RC Slab Bridge, Vikas Huria, Kuo-Liang Lee and A. Emin Aktan, ST Jan.

93, p88-107.

Nonlinear Geometric and Material Behavior of Shell Structures with Large Strains, S. A. Schimmels and A. N. Palazotto, EM Feb. 94, p320-345.

Nonlinear Inelastic Analysis of Steel Beam-Columns I: Theory, Yong Lin Pi and N. S. Trahair, ST July 94, p2041-2061.

Nonlinear Inelastic Analysis of Steel Beam-Columns II: Applications, Yong Lin Pi and N. S. Trahair, ST July 94, p2062-2085

Nonlinear Lateral, Rocking, and Torsional Vibration of Rigid Foundations, Ronaldo I. Borja, Wen-Hwa Wu, Al-exander P. Amies and H. Allison Smith, GT Mar. 94, p491-513.

Nonlinear Model for Building-Soil Systems, D. B. McCallen and K. M. Romstad, EM May 94, p1129-1152.

iren and N. M. Romstad, Em Waly 34, PJ 129-1132.
Nonlinearity and Free-Surface Flow, Nazeer Ahmed, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p527-331.
Note on Bearing Capacity of Soft Clays under Embankments, H. S. Yu and S. W. Sloan, GT Jan. 94, p246-255.

An Object-Oriented Approach to PC Finite-Element Solutions, Robert J. Lang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1236-1243.

Pointwise Equilibrating Polynomial Element for Nonlinear Analysis of Frames, Siu Lai Chan and Zhi Hua Zhou, ST

June 94, p1703-1717.

Postcracking Formulation for Analysis of RC Structures Based on Secant Stiffness, Ananth Ramaswamy, F. Barzegar and G. Z. Voyiadjis, EM Dec. 94, p2621-2640.

Prediction of Settlement for Five Footings, Ameir Altaee and Bengt H. Fellenius, (Predicted and Measured Be-havior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p206-

Probabilistic Nonlocal Damage Model for Continua with Random Field Properties, J. Carmeliet and H. Hens, EM

Oct. 94, p2013-2027.

Oct. 94, p.2013-2027.

Quasi-Two Dimensional Modelling of Flood Routing in Rivers and Flood Plains by Means of Storage Cells, E. Bladé, M. Gómez and J. Dolz, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p.156-170.

RC Beam-Column Element for Nonlinear Frame Analysis Enrico Spacone and Filip C. Filippou, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p155-164.

Recent Advances in 3D Non-Linear FE-Analysis of R/C and P/C Beam Structures, Franz-Josef Ulm, Jean-Luc Clément and Johann Guggenberger, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1427-1432.

Reliability of Uncertain Nonlinear Trusses Under Random Excitation. II, R.-H. Cherng and Y. K. Wen, EM Apr.

Reliability of Uncertain Nonlinear Trusses Under Random Excitation. I, R.-H. Cherng and Y. K. Wen, EM Apr. 94,

Repair of a Cracked Cooling Tower Shell Based on Numerical Simulations, Thomas Huemer, Christian Kropik, Herbert A. Mang and Günther Meschke, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p887-

Response of Space Trusses During Progressive Failure, George E. Blandford and Shien T. Wang, (Dynamic Response and Progressive Failure of Special Structures,

Ramesh B. Malla, 1993), p1-16.
Seismic Behaviour of Tall Guyed Telecommunication
Towers, Ghyslaine McClure and Eduardo I. Guevara, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p259-268.

Seismic Study of a Cable-Stayed Bridge, K. C. Yiak and S. Pezeshk, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1197-1207.

Simple Semi-Loof Element for Analyzing Folded-Plate Structures, K. Y. Sze, EM Jan. 94, p120-134.

Simulation of Heat Transfer Around a Canister Placed Horizontally in a Drift, Samir Moujaes and Akshay Bhargava, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p801-808.

Simulation Procedure for Buckling Behaviors of a Reticular Dome, Shiro Kato, Hideyuki Takashima, Isao Kubodera and Takashi Ueki, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p460-468. Stability Analysis of Stiffened Plates and Shells, U. Jäppelt

and H. Rothert, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U.

Penalba, ed., 1994), p917-926.

Steady-State Analysis of Buckle Propagation, André Nogueira and John L. Tassoulas, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1514-1519.

Structure Modelization Using Expert Elements 'Neural Stiffness Method', Ricardo Barrenechea, Fabián Calcagno and Guillermo Gulli, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p676-683.

Study of Stress Concentrations at the Intersection of Underground Chambers for the Superconducting Super Collider Project, Fwu-Ding (Kim) Lin, Lichu Guan and Steven Baldauf, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1975-1982.

A Technique to Perform Coupled Consolidation Analysis Using Two Independent Softwares, Jichun Sun, Harianto Rahardjo and Delwyn G. Fredlund, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p849-856.

Engineering, Anani Knozemen, ed., 1994), p849-850. Three Dimensional Modelling of Estuarine Sediment Transport, A. Malcherek, C. LeNormant, E. Peltier, C. Teisson, M. Markofsky and W. Zielke, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Crais Supresson ed. 1961, 245-25. Craig Swanson, ed., 1994), p42-57

Towards Robust, Effective and Efficient Second Order Analysis of Practical Steel Frames, S. L. Chan, Z. W. Zhou and W. F. Chen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1173-1178.

Ultimate Loading Capacity of Braced Domes, X. Chen, N. Wang and S. Z. Shen, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p539-546.

Uplift Modeling for Fracture Mechanics Analysis of Concrete Dams, Raymond R. Dewey, Ronald W. Reich and Victor E. Saouma, ST Oct. 94, p3025-3044. Use of a Modified Hybrid Model to Analyze the

Effectiveness of Jetties in Reducing Marina Sedimentation, S. Jarrell Smith and E. J. Hayter, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p543-547.

Use of Composite Timber-concrete Floors in Residential Buildings, B. H. Ahmadi and M. P. Saka, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p508-513.

Use of FESWMS-2DH for the Attaway Road Bridge Repair Project, M. A. Ports, D. D. Dee, Jr. and J. Warren, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p579-583.

Vibration Characteristics of Suspension Membrane Struc-tures, Norio Masaoka, Kazuo Ishii and Ryo Muranaka, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p732-741.

Vibration of Foundations on Incompressible Soils with No Elastic Region, Ronaldo I. Borja and Wen-Hwa Wu, GT Sept. 94, p1570-1592.

A Wind Driven Lake Circulation Finite Element Model for the Upper St. Marys River, E. M. Yuen and J. A. McCorquodale, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p584-

Finite strip method

Combined Boundary Element / Finite Strip Analysis of Bridges, M. S. Cheung, Georges Akhras and W. Li, ST Mar. 94, p716-727.

Local Buckling by Complex Finite Strip Method Using Bubble Functions, Mojtaba Azhari and Mark Andrew Bradford, EM Jan. 94, p43-57.

Emergency Response Preparedness Analysis for Radioactive Materials Transportation, Emelinda M. Parentela, Shashi K. Sathisan, Sandeep S. Burli and Walter C. Vodrazka, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1249-1254.

Fire prevention

Fire Survey Compiles Hot 100, CE Sept. 94, p11-12.

Fire protection

Fire Resistance of Concrete-Filled, Fire-Resistant Steel-Tube Columns, Y. Sakumoto, T. Okada, M. Yoshida and S. Tasaka, MT May 94, p169-184.

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Fire Resistance of Circular Steel Columns Filled with Bar-Reinforced Concrete, T. T. Lie, ST May 94, p1489-

Fire Resistance of Fire-Resistant Steel Columns, Y. Sakumoto, T. Yamaguchi, T. Okada, M. Yoshida, S. Tasaka and H. Saito, ST Apr. 94, p1103-1121.

Fires Deemed to Have Tested Structural Performance, Paul R. De Cicco, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p990-995.

Fire resistant materials

Consequential Fire Loads on Structures, Donald O. Dusenberry, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p996-1001.

Fire Resistance of Fire-Resistant Steel Columns, Y. Sakumoto, T. Yamaguchi, T. Okada, M. Yoshida, S. Tasaka and H. Saito, ST Apr. 94, p1103-1121.

Consequential Fire Loads on Structures, Donald O. Dusenberry, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p996-1001.

Fires Deemed to Have Tested Structural Performance, Paul R. De Cicco, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p990-995.

Synopsis of a Manual on Structural Fire Protection, T. T. Lie and E. L. Schaffer, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1002-1005.

Experimental and Numerical Studies of Composite Beams Exposed to Fire, Dietmar Hosser, Thomas Dorn and Osama El-Nesr, ST Oct. 94, p2871-2892.

Fire Resistance of Concrete-Filled, Fire-Resistant Steel-Tube Columns, Y. Sakumoto, T. Okada, M. Yoshida and S. Tasaka, MT May 94, p169-184.

Fire Survey Compiles Hot 100, CE Sept. 94, p11-12.

Moisture and Heat Flow in Concrete Walls Exposed to Fire, Jana Šelih, Antonio C. M. Sousa and Theodore W. Bremner, EM Oct. 94, p2028-2043.

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Fish Entrainment and Strategies for Diversion, Andrew R. Blystra, Dennis J. McCauley and John E. Navarro, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p447-451.

Fish conservation

Fish Passage/Protection: Big Costs, Little Data, CE June 94, p29.

A Salmon Population Model for Evaluating Alternative Flow Regimes, John M. Bartholow and Terry J. Waddle, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p877-880.

Fish habitats

Changing Dam Operating Criteria to Accommodate Aquatic Biological Diversity, Daniel F. Luecke, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p218-221.

Coarse Sediment Transport and the Maintenance of Fish Habitat in the Upper Colorado River, John Pitlick, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p855-859.

Evolution of an Endangered Species Study-The Ouachita Madtom, Gregory M. Quartucci and Fred C. Pinkney, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p846-849.

Flushing Flows for the Water Manager, Robert T. Milhous, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

p226-229.

Numerical Modeling for Sediment-Pass-Through Opera-tions of Reservoirs, Howard H. Chang, Larry L. Harrison, Wing Lee and Scott Tu, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1014-1019.

Restoration of Lakes and Canals in an Urban Park - Belle Isle, Michigan, Catherine Riseng, Douglas Denison and Bernard Fekete, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p261-270.

Fish management

Analyzing Larval Fish Distributions Using Hydrodynamic nalyzing Larval Fish Distributions Using Hydrodynamia and Transport Modelling, John Eric Edinger, Edward M. Buchak and Michael D. McGurk, (Estuarine and Coast-al Modeling III. Malcolm L. Spaulding, ed., Keith Bed-ford, ed., Alan Blumberg, ed., Rajph Cheng, ed. and Craig Swanson, ed., 1994), p536-550.

Goal Programming Models for Determining Freshwater Inflows to Estuaries, Ning Mao and Larry W. Mays, WR

May/June 94, p316-329.

Tailwater Fishery Management Using a Fish Bioenergetics Model, Ming Shiao, Gary Hauser, Gary Chapman, Bruce Yeager, Tom McDonough and Jim Ruane, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p45-48.

Changing Dam Operating Criteria to Accommodate Aquat-ic Biological Diversity, Daniel F. Luecke, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p218-221.

Design and Testing of Two Ice-Preserving Winter Lake Aeration Systems, Christopher R. Ellis and Heinz G. Stefan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1326-

A Fish Bypass Screen at Puntledge Project, Herbert Louie, John Taylor and Larry J. Swenson, (Hydraulic Engineer-ing '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p442-446.

Fish Entrainment and Strategies for Diversion, Andrew R. Blystra, Dennis J. McCauley and John E. Navarro, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p447-451.

Fish Passage/Protection: Big Costs, Little Data, CE June

94, p29.

Fishy Business, John Prendergast, CE Nov. 94, p60-63. Instream Flow Strategies for Operation of the Federal Cen-Istram Frow Strategies for Operation of the Federal Central Valley Project, Serge Birk, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p315-318.

Fish reproduction

Managing Reservoir Storage for Fish Production, Terry Waddle and Jeff Sandelin, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p49-52.

Modeling Temperature Impacts on Salmon Survival, Jamie D. Anderson and Gerald T. Orlob, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p323-326.

A Salmon Population Model for Evaluating Alternative Flow Regimes, John M. Bartholow and Terry J. Waddle, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p877-880.

A Three-Dimensional Numerical Simulation of Seasonal Flow and Salt Transport in the C&D Canal, Bernard B. Hsieh, David R. Richards and Jeff Gebert, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p595-599.

Wind Lake Improvement Plan Dredging Project Wind Lake, Wisconsin, Robert W. Carr and Kathy Aron, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

Fish screens

Design Considerations for Use of Wedge Wire Screens at Surface Water Intake Structures, Mahmood Naghash and Adnan M. Alsaffar, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p452-456.

A Fish Bypass Screen at Puntledge Project, Herbert Louie, John Taylor and Larry J. Swenson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer,

ed., 1994), p442-446.

Mapping 2-D and 3-D Velocity Components in Circular Conduits Using an Electromagnetic Current Meter and a 5-Hole Pilot Probe, Joseph J. Orlins and Lawrence J. Swenson, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p53-61.

Policy Issues Related to Replacement of Fish Screens at Glenn-Colusa Intake, Michael R. Stansbury, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p153-156.

Fish stocking

The Economic Cost of Stocking Catchable Rainbow Trout, Donn M. Johnson and Richard G. Walsh, (*Water Policy and Management: Solving the Problems*, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p549-552.

Alameda Creek Water Resources Study, Terry L. Erlewine and Edward H. Stewart, (Water Policy and Manage-ment: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p17-20.

Construction of Intertidal Mudflats as a Beneficial Use of Dredged Material, G. L. Ray, D. G. Clarke, T. P. Wilber and T. J. Fredette, (*Dredging '94*, E. Clark McNair, Jr.,

ed., 1994), p946-955.

Development of Fisheries Models for the Missouri River System, Mark Harberg, Doug Latka, Tom Cole, John Nestler and Gene Ploskey, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p742-745.

Dredging of Fishing Harbour, Walvis Bay, Keith Mackie, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1037-

Effects from Thin-Layer Disposal of Dredged Material on Water Quality in Mississippi Sound, Susan Ivester Rees and Pace Wilber, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1481-1489.

Exemplary Plans of a Fisharina in Japan, Takeshi Kawagu-chi, Hideki Hata and Yasuhiro Yoshizuka, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p211-221.

Fisharina Policies in Japan, Noboru Oshima, Sanji Kida, Motobumi Manabe and Nobuo Mikami, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p201-210.

Fishy Business, John Prendergast, CE Nov. 94, p60-63. Goal Programming Models for Determining Freshwater Inflows to Estuaries, Ning Mao and Larry W. Mays, WR May/June 94, p316-329. Habitat Value of Offshore Dredged Material Berms for Fishery Resources, Douglas Clarke and Richard Kasul, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p938-945 Impacts of Low Flows on the Alluvial Rivers of the South-

west Region of Bangladesh, Daryl B. Simons, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p125-129. New Methodology for Optimization of Freshwater Inflows to Estuaries, Yixing Bao and Larry W. Mays, WR Mar./

Apr. 94, p199-217. Optimization of Freshwater Inflows to Lavaca-Tres Pala-

cios, Texas, Estuary, Yixing Bao and Larry W. Mays, WR Mar/Apr. 94, p218-236. Surface Water Quality Modeling in the Rio Grande, Nicole Seguin, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel,

ed., 1994), p778-781.

Tailwater Fishery Management Using a Fish Bioenergetics Model, Ming Shiao, Gary Hauser, Gary Chapman, Bruce Yeager, Tom McDonough and Jim Ruane, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p45-48. Using Geographical Information Systems to Manage a

Multipurpose Water Project, Stan B. Mattingly, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p33-36.

Differential Dynamic Programming for Estuarine Manage-ment, Guihua Li and Larry W. Mays, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p653-656.

Exemplary Plans of a Fisharina in Japan, Takeshi Kawagu-chi, Hideki Hata and Yasuhiro Yoshizuka, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p211-221.

Fisharina Policies in Japan, Noboru Oshima, Sanji Kida,

Motobumi Manabe and Nobuo Mikami, (Marinas, Parks

and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p201-210.

Multiobjective Models for Determining Freshwater Inflows to Bays and Estuaries, Ning Mao, Lise LeBlanc, James Siebert, Wenchin Shi and Larry W. Mays, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p649-652.

Planning and Improvement of Coastal Area Utilization, Masatsugu Fukuya, Junji Tanaka, Shigeki Nakamura, Toshiya Tanichi and Hideyuki Kida, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p222-231.

An Improved Design of Fishways Under High Variation of Headwater, Kuo-Cheng Hsieh, Sue-Jen Wu and Che-Yuan Huang, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p457-

Fissures

Application of Fracture Mechanics to Soils: An Overview, Luis E. Vallejo, (Fracture Mechanics Applied to Geo-technical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p1-20.

Fixed objects

Poisson Effect in Extensive Cables with Both Ends Fixed, John V. Huddleston and Hee-Jung Ham, EM July 94, p1590-1595.

Failure Stages in Timber Fixed Piers: Design for Minimal Reconstruction After a Storm, Jon Guerry Taylor and Mark D. Bolchoz, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p406-413.

Fixed-film process

Oxygen Utilization of Trickling Filter Biofilms, Steven W. Hinton and H. David Stensel, EE Sept./Oct. 94, p1284-

Design of Box Girder Bridges by Nonlinear Theory, Ahmad Salahuddin, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p491-496. Local Buckling of Pultruded FRP Beams: Theory and Experiment, L. C. Bank, M. Nadipelli, T. R. Gentry and J. S. Yin, (Structures Congress XII, N. C. Baker, ed. and

Barry J. Loodno, ed., 1994), p417-422. Prestressed Concrete Failures Due to Uplift, Wimal Suaris, (Structures Congress XII, N. C. Baker, ed. and Barry J.

(Structures Congress Mt., C. Baket, et. and Barry J. Loodno, ed., 1994), p1433-1438.

Response of Stressed Timber T - and Box-Beam Bridges, Hota GangaRao, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p701-706.

Flexibility

Asphalt Portland Cement Concrete Composite: Laboratory Evaluation, I. L. Al-Qadi, H. Gouru and R. E. Weyers, TE Jan./Feb. 94, p94-108.

Effect of Flexibility on Impedance Functions for Circular Foundation, Gin-Show Liou and Pao-Han Huang, EM July 94, p1429-1446.

Experimental Verification of Beam Models for RC, Toshikatsu Ichinose and Katsuki Takiguchi, ST Aug. 94,

p2261-2280.

High-Order Bending of Sandwich Beams with Transversely Flexible Core and Nonparallel Skins, D. Peled and Y. Frostig, EM June 94, p1255-1269.

Identification of Aeroelastic Parameters of Flexible Bridges, Partha P. Sarkar, Nicholas P. Jones and Robert H. Scanlan, EM Aug. 94, p1718-1742.

The Light at the End of the Sewer: How Interested Parties Negotiated a Consensus Solution to the Combined Sewer Overflow Problem, David S. Bailey, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p204-210.

Modular Spacecraft, Warren Frisina, AS Oct. 94, p411-

On the Dynamics and Control of Flexible Orbiting Systems: An Approach with Application, V. J. Modi and A. Suleman, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj,

ed., 1994), p1-17. Simulation of Blast Pressure on Flexible Panels, Avinash C. Singhal, Debra Larson, Sanjay Govil and Vikram

Karmakar, ST July 94, p2011-2020.

Soil Water Model for Evaluating Water Delivery Flexibility, Sophie Lamacq and Wesley W. Wallender, IR July/Aug. 94, p756-774.

Turbulent Boundary Layer Over Flat Plate with Rigid and Flexible Surfaces, M. S. Abu Sharekh, S. K. Pathak, G. L. Asawa and P. D. Porey, EM Aug. 94, p1675-1695. Use of Waste Rubber in Light-Duty Concrete Pavements, Richard R. Schimizze, James K. Nelson, Serji N. Amir-

khanian and John A. Murden, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p367-374.

Flexible connections

Simplified Creep Analysis of Composite Beams with Flexible Connectors, Luigino Dezi, Carlo Ianni and Angelo Marcello Tarantino, ST May 93, p1484-1497.

Effects of Routine Maintenance on Flexible Pavement Condition, Abdullah I. Al-Mansour, Kumares C. Sinha and Thomas Kuczek, TE Jan./Feb. 94, p65-73.

Evaluation of Laboratory Limerock Bearing Ratio Test on Pavement Soils in Florida, W. Virgil Ping and Zhiliang Yu, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p223-230.

Fatigue Cracking and Rutting in Flexible Pavements, D. V. Ramsamooj, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y.

Liang, ed., 1994), p132-146.

How Do Geosynthetics Improve Pavement's Performance, Imad L. Al-Qadi, Thomas L. Brandon, Timothy E. Smith and Bruce A. Lacina, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p606-616.

Importance of Speed and Frequency in Flexible Pavement Response, M. S. A. Hardy and D. Cebon, EM Mar. 94,

easonal Variation of Resilient Modulus of Subgrade Soils, Myung S. Jin, K. Wayne Lee and William D. Kovacs, TE July/Aug. 94, p603-616.

Statistical Quality Control and Assurance in Bituminous Materials, Y. J. Chou and W. V. Ping, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1051-1058.

Vertical Pavement Strain as Means of Weighing Vehicles, J. G. Marsh and R. J. Jewell, TE July/Aug. 94, p617-632.

Flexible pipes
Basics of Flexible Pipe Structural Design, R. C. Prevost and K. K. Kienow, TE July/Aug. 94, p652-671.

Flexural strength

Confining Reinforcement for Concrete Columns, S. Watson, F. A. Zahn and R. Park, ST June 94, p1798-1824.

The Effect of Composite Reinforcement on Structural Wood, Beckry Abdel-Magid, Habib J. Dagher and Tod Kimball, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p417-424.

Flexural Behavior of Simcon, David J. Akers and Ziad Bayasi, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p375-379. Flexural Member Bending Strength Limits in the New

LRFD Bridge Code, Karl H. Frank, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p544-548.
Flexural Strength of Fiber Cementitious Composites, Mohamed Maalej and Victor C. Li, MT Aug. 94, p390-

Flexural Strength of Profiled Beams, Deric J. Oehlers, Howard D. Wright and Matthew J. Burnet, ST Feb. 94, p378-393.

Flexural/Tensile-Strength Ratio in Engineered Cementitious Composites, Mohamed Maalej and Victor C. Li,

MT Nov. 94, p513-528.

Marta North Line Midtown Station, Jerzy T. Jacak and Cheryl L. McAfee, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p176-181.

Simulated Seismic Load Tests on Reinforced Concrete Columns, S. Watson and R. Park, ST June 94, p1825-

Structural Behavior of Polymer Concrete Beams Using Re-cycled Plastic, Karim S. Rebeiz, Sleiman P. Serhal and David W. Fowler, MT Feb. 94, p150-165.

Unified Code Provisions for Concrete Bridges, Antoine E. Naaman, (Structures Congress XII, N. C. Baker, ed. and

Barry J. Loodno, ed., 1994), p555-560.

The Use of High Performance Fiber Reinforced Cement Composites for Seismic Rehabilitation, Neven Krstulovic-Opara, Chia-Ming Uang and Abdol Haghayeghi, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p812-819.

Use of Synthetic Fibers for Reinforcement of Thin Sheet Cement Products, Nazmi Sharabi, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed.,

1994), p545-550.

Flexural Analysis of Reinforced Concrete Beams Containing Steel Fibers, Byung Hwan Oh, ST Oct. 92, p2821-

Impact and Flexure Properties of Glass/Vinyl Ester Composites in Cold Regions, Vistasp M. Karbhari and Greg-ory Pope, CR Mar. 94, p1-20.

Load-Eccentricity Effects on Cold-Formed-Steel Lipped-Channel Columns, Thomas H. Miller and Teoman Pekoz, ST Mar. 94, p805-823.

New Concept for Wrapping Columns with a High Strength Fiber/Epoxy System, Edward R. Fyfe, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1156-1162.

Floating breakwaters

Wave Grouping in Locally Generated Seas on Short Fetches, Edward F. Thompson and John Oliver, WW Mar./Apr. 94, p220-225.

Floating structures

Composite 2D/3D Hydroelastic-Analysis Method for Floating Structures, Xiling Che, H. Ronald Riggs and R. Cengiz Ertekin, EM July 94, p1499-1520.

Floating Cover Influence on Sediment Transport in Dune-Bed Channels, Brennan T. Smith and Robert Ettema, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1156-1160. Specifying and Attaining Acceptable Marina Tranquility, Jack C. Cox, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p470-479.

Effects of Flocculation on Particle Transport, Wilbert Lick, nects of Pioceulation on Particle Transport, Wilbert Lick, C. Kirk Ziegler, James Lick and Aruna Joshi, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p172-186.

Flocculation Kinetics Using Fe(III) Coagulant to Coagulate Kaolin Clay in Water: Effects of Temperature, Lim-Scok Kang and John L. Cleasby, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p162-169.

Floculation Techniques Used for Dredging Operations, Ronald H. Church, Carl W. Smith and Bernard J. Scheiner, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1497-1506.

Bridge-Pier Location and Ice Conveyance in Curved Channels, Gilberto E. Urroz, Joseph Schaefer and Robert Ettema, CR June 94, p66-72.

Flood control

Analysis of Levee Design in a Mountain River Using Two-Dimensional Flow Modeling, Diane M. L. Mas, Andrew J. Miller, James A. Smith and Wei-hao Chung, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p757-761.

ASCE to White House: Improve Flood Controls, CE Aug. 94, p96.

ASCE Urges White House to Back New Flood-Control Measure, NE July 94, p1,15.

Comparison of Results from Alluvial Fan Design Methodology with Historic Data, Syndi J. Flippin and Richard H. French, IR Jan./Feb. 94, p195-210.

Conservation Group Urges Flood-Control Reform, CE Sept. 94, p18.

Corps-Modified Levees Just Ducky for Waterfowl, CE Apr. 94, p22.

A Deep Soil Mix Cutoff Wall at Lockington Dam, Ohio, Andrew D. Walker, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p133-145.

Determination of Sediment Profile for a Dry Flood Control Basin, Rebecca J. Stonestreet and Scott E. Stonestreet, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1004-1008.

DSM Saves the Dam, Andrew D. Walker, CE Dec. 94,

p48-51.

Effects of Global Warming on Hurricane-Induced Flooding, William J. Gutowski, George F. McMahon, Shing S. Schluchter and Paul H. Kirshen, WR Mar./Apr. 94,

Elmhurst Quarry Flood Control Project, Anthony J. Charlton, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed.,

1994), p107-110.

Explicit Stochastic Modelling of a Reservoir for Hydropower Production, Slobodan P. Simonovic and Rangarajan Srinivasan, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p368-371.

Flood Control vs. Flood Management, Philip A. Williams, CE May 94, p51-54.

Flood Loss Assessment with Integrated Measures, Yacov Y. Haimes, Duan Li, Vijay Tulsiani, Eugene Z. Stakhiv and David Moser, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p219-233. Georgia Dams Hit Hard in Flooding from Tropical Storm,

NE Aug. 94, p5.

Global-Climate Model, ET Aug./Sept. 94, p11.

Hocking River Sedimentation Study, Jon B. Fripp, Kenneth C. Halstead and Surya Bhamidipaty, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1120-1124.

Identification of Problems, Solutions, and Cost Savings for Maintenance of Drainageways, Mark R. Hunter, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p194-208.

Instream and Streambank Environmental Feature Guidelines, J. Craig Fischenich, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p406-410.

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Kissimmee River Restoration Study, Hsieh Wen Shen, Guillermo Tabios, III and James A. Harder, WR May/ June 94, p330-349.

Measuring the Benefits of Flood Risk Reduction, Leonard Shabman, (Risk-Based Decision Making in Water Re-sources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p122-135.

Miami International Airport Stormwater NPDES Plan, Armando I. Perez, Jonathan Z. Goldman, Michael F. Schmidt and Edward E. Clark, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p540-547.

The Plants Must Go On, CE May 94, p8.

Preliminary Sizing of Detention Reservoirs to Reduce Peak Discharges, Bruce M. McEnroe, HY Nov. 92, p1540-

Quantifying Flood Damage Uncertainty, David A. Moser, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p201-218.

Reservoir Operation by the Use of an Expert System, Tiao J. Chang and David Moore, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p97-104.

The Rest of the Best, Josh Kosman, CE July 94, p44-48. Retaining and Flood Walls, U.S. Army Corps of Engineers,

1994, 0-87262-968-6, 320pp. Revised Hydraulic Design of the Rio Hondo Flood Control Channel, Scott E. Stonestreet, Michael E. Mulvihill and John E. Hite, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p401-

Riparian Wetlands and Flood Stages, F. Douglas Shields, Jr. and Charles M. Cooper, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p351-355.

Risk Management Strategies for Natural, Manmade, and Technological Hazards, Benjamin F. Hobbs, (), p348-

Safety Grates in Supercritical Channels, Julia E. Allred-Coonrod, IR Jan./Feb. 94, p218-224.

Survey of Stormwater Detention State of Practice, Ben R. Urbonas, Jay Carlson and L. Scott Tucker, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p873-876.

Using Knowledge Based Systems for Training the Young Engineer, James Crum and Michael Mulvihill, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p1286-1293.

West Columbus, OH LPP Gate Closure Analysis - A Study of the Requirements for Multiple Closures, Kenneth C Halstead and Surya Bhamidipaty, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p472-476.

When the Levee Breaks, James Denning, CE Jan. 94, p38-

A Workable Compromise on Flood Control, CE Sept. 94, p6.

Flood damage

Analysis of the Causes and Triggering Events of Disastrous Torrent Flood, Milivoje Brajković and Zoran Gavrilo-vić, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p640-644.

Combining a 2-D Flood Plain Model with GIS for Flood Delineation and Damage Assessment, P. Di Giammarco, E. Todini, David Consuegra, F. Joerin and F. Vitalini, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p171-185.

Dam Safety Issues Related to Urban Detention Ponds, James E. Alverson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p714-717.

Damage to Highway Infrastructure 1993 Mississippi River Basin Flooding, A. C. Parola, T. E. Fenske and D. J. Hagerty, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p26-30.

Environmental Effects of Flooding at a USCG Base, Virginia L. Bretzke and Michael J. Donnelly, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p781-787.

Evaluating Risk of Extreme Events for Univariate-Loss Functions, James H. Lambert and Duan Li, WR May/

June 94, p382-399.

Evaluation of the Return Period of the September 1992 Flood in Genova, Italy, Paolo Bartolini and Juan B. Valdés, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p102-106.

Floodflow Effects on Riparian Vegetation in Arizona, J. V. Phillips and H. W. Hjalmarson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p707-711.

Georgia Dams Hit Hard in Flooding from Tropical Storm, NE Aug. 94, p5.

Impacts of the 1993 Flood on the Mississippi River in Illinois, Nani G. Bhowmik, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p613-617.

Measuring the Benefits of Flood Risk Reduction, Leonard Shabman, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p122-135.

Problems of Stream Flood Simulation and Prediction, Shou-shan Fan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1110-1114.

Quantifying Flood Damage Uncertainty, David A. Moser, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p201-218.

Relationships between n-Day Flood Volumes for Infrequent Large Floods, James B. Balocki and Stephen J. Burges, WR Nov./Dec. 94, p794-818.

Risk-Based Analysis for Flood Damage Reduction, Darryl W. Davis and Michael W. Burnham, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p194-200.

Relation Between Largest Known Flood Discharge and Elevation in Montana, Charles Parrett and Stephen R. Holnbeck, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p870-

A Stochastic Framework for the Modeling of Failures in Urban Drainage Systems due to Microscale Effects, P. La Barbera, L. Lanza and U. Parodi, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p197-208.

Flood forecasting

2D Finite Element Modelling of Flooding Due to River Bank Collapse, L. D'Alpaos, A. Defina and B. Matticchio, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p60-71.

An Adaptive Nine-Point Finite Volume Roe Scheme for Two-Dimensional Saint-Venant Equations, Fayssal Benkhaldoun and Luc Monthe, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p30-44.

BPA Realtime Hydrologic Forecasting System for the Columbia River Basin, L. von der Heydt, L. E. Brazil and K. Jawed, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p5-8.

Calculation of 2D Flood Propagation Using the Program Package Floodsim, W. Bechteler, M. Nujic and A. J. Otto, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p257-267.

Discharge-Frequency Relationships in Distributary Flow Systems, Edward R. Mifflin, (Hydraulic Engineering 94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p1085-1089.

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Evaluation of Six Methods for the LP3 Distribution, Fang Xin Yu and Babak Naghavi, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1080-1084.

Finite Element Algorithms for Modelling Flood Propagation, J.-M. Hervouet and J.-M. Janin, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p102-113.

Flood Control vs. Flood Management, Philip A. Williams, CE May 94, p51-54.

Flood Monitoring Network In Southeastern Louisiana, Brian E. McCallum, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p346-

Geographical Information Systems and Remote Sensing: a possible support in 2D modelling of flood propagation, Possible Support in 2D inducting of nood propagation, F. F. Amighetti, P. P. Congiatu, A. Di Filippo and P. Molinaro, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p143-155.

Operational Interactive Hydrologic Forecasting with the National Weather Service River Forecast System, Donna Page and George F. Smith, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and

Harry N. Tuvel, ed., 1994), p1-4.

Plain flooding: near field and far field simulations, G. Braschi, F. Dadone and M. Gallati, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p45-59.

Problems of Stream Flood Simulation and Prediction, Shou-shan Fan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1110-1114.

Real-Time Flood Forecasting Using Adaptive Estimation, Dong Kug Jeong and Ben Chie Yen, (Hydraulic Engi-neering '94, George V. Cotroneo, ed. and Ralph R. Ru-mer, ed., 1994), p341-345.

Reliability of Flood Warning Systems, Roman Krzyszto-fowicz, Karen S. Kelly and Dou Long, WR Nov/Dec.

94, p906-926.

Streamflow Related to Channel Geometry in Northern New England, Kevin J. Palaia and S. Lawrence Dingman, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p865-869.

Two-Dimensional Dam-Break Flow Simulation in a Sudden Enlargement, M. Četina and R. Rajar, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p268-282.

Using GIS to Develop 2-D Hydraulic Models, Craig R. Wilkening, Lynn E. Johnson and Joel Herr, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p136-140.

West Columbus, OH LPP Gate Closure Analysis - A Study of the Requirements for Multiple Closures, Kenneth C Halstead and Surya Bhamidipaty, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p472-476.

Flood frequency

Climatic Perspective on the 1993 Mississippi R. Flood, Kenneth E. Kunkel, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p600-602.

Discharge-Frequency Relationships in Distributary Flow Systems, Edward R. Mifflin, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1085-1089.

Evaluation of Six Methods for the LP3 Distribution, Fang Xin Yu and Babak Naghavi, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1080-1084.

Frequency of the 1993 Flood in the Upper Mississippi River Basin, W. O. Thomas, Jr. and D. A. Eash, (Hy-draulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p16-20.

Historical Trends in Flood Discharges on the Upper Missis-sippi River, H. Vernon Knapp, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p618-622.

Homogeneity Tests Based Upon Gumbel Distribution, Heinz D. Fill and Jery R. Stedinger, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p790-793.

Palaeohydraulic reconstruction of floods in upland UK bedrock streams: progress, problems and prospects, Paul A. Carling, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p860-

Relationships between *n*-Day Flood Volumes for Infrequent Large Floods, James B. Balocki and Stephen J. Burges, WR Nov./Dec. 94, p794-818.

The Summer of 1993 Floods Lower Missouri River, William H. Espey, Jr., Leo R. Beard and John E. Reinfurt, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p628-633.

Flood hydrology

Relationships between n-Day Flood Volumes for Infrequent Large Floods, James B. Balocki and Stephen J. Burges, WR Nov./Dec. 94, p794-818.

Flood Management

ASCE Urges White House to Back New Flood-Control Measure, NE July 94, p1,15.

Flood Control vs. Flood Management, Philip A. Williams, CE May 94, p51-54.

From Crane Safety to Watershed Management, ASCE Board Adopts Five New Policies, NE July 94, p15.

Flood peaks

Minimizing the Probable Maximum Flood, Mark A. Woodbury, Douglas T. Eberlein and Nicholas Pansic, CE June 94, p64-65.

Flood plain insurance

GIS Application for Floodplain Analysis and Mapping, David J. Greenwood, Ramzi K. Bannura and Myles E. Powers, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p232-236.

Hydrodiplomacy on Forester Creek, Lisa T. M. Vomero-Inouye, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel,

ed., 1994), p557-560.

Flood plain planning Streamflow Related to Channel Geometry in Northern New England, Kevin J. Palaia and S. Lawrence Dingman, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p865-869.

Flood plain studies ARC/HEC2: an ARC/INFO - HEC-2 Interface, Dean Djokic, Mark A. Beavers and Chandrashekar K. Deshakulakarni, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p41-44.

GIS Application for Floodplain Analysis and Mapping, David J. Greenwood, Ramzi K. Bannura and Myles E. Powers. (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p.232-236

Flood plain zoning

Flood Control vs. Flood Management, Philip A. Williams, CE May 94, p51-54.

Flood plains

Anomalous Measurements in a Compound Duct, David G. Rhodes and Donald W. Knight, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p311-320.

Boundary Shear in the Vicinity of River Banks, Donald W. Knight and Shuyou Cao, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p954-958.

Clear-Water Scour around Abutments in Floodplains, Terry W. Sturm and Nazar Sadiq Janjua, HY Aug. 94, p956-972.

Combining a 2-D Flood Plain Model with GIS for Flood Delineation and Damage Assessment, P. Di Giammarco, E. Todini, David Consuegra, F. Joerin and F. Vitalini, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p171-185.

Comparison of Results from Alluvial Fan Design Method-ology with Historic Data, Syndi J. Flippin and Richard H. French, IR Jan./Feb. 94, p195-210.

Experimental Study on Unsteady Flow in Open Channels with Flood Plains, A. Tominaga, M. Nagao and I. Nezu, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p396-405.

Hydrodiplomacy on Forester Creek, Lisa T. M. Vomero-Inouye, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel,

ed., 1994), p557-560.

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Impacts of the 1993 Flood on the Mississippi River in Illinois, Nani G. Bhowmik, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p613-617.

Plain flooding: near field and far field simulations, G. Braschi, F. Dadone and M. Gallati, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p45-59.

Procedures for Evaluating the Effects of Sedimentation on Flood Hazards in Urbanized Areas in the Southwestern U.S. R. A. Mussetter, P. F. Lagasse, M. D. Harvey and C. A. Anderson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p425-428.

Quasi-Two Dimensional Modelling of Flood Routing in Rivers and Flood Plains by Means of Storage Cells, E. Bladé, M. Gómez and J. Dolz, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p156-170.

Slurry Trenching for Waterway Pipeline Installation, Samuel Carreon and Brian Doeing, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed.,

1994), p261-279.

Tug Fork Flood Plain Modifications and Wetlands Mitigation, M. A. Ports, D. D. Dee, Jr. and C. Riling, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p766-

Flood routing

Hybrid Noninertia and Statistical Model Versus Hydrodynamic Routing, Hussam E. S. Fahmy and Hubert J. Morel-Seytoux, HY June 94, p706-721.

Natural and Dam Break Flood Routing in Mountain Rivers, Enan F. Jayyousi, David S. Bowles and Roland W. Jeppson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p371-

Quasi-Two Dimensional Modelling of Flood Routing in Rivers and Flood Plains by Means of Storage Cells, E. Bladé, M. Gómez and J. Dolz, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p156-170.

Real-Time Flood Forecasting Using Adaptive Estimation, Dong Kug Jeong and Ben Chie Yen, (Hydraulic Engi-neering '94, George V. Cotroneo, ed. and Ralph R. Ru-mer, ed., 1994), p341-345.

Step-Function Response of Muskingum Reach, J. C. I. Dooge, M. Perumal and Q. J. Wang, IR Mar./Apr. 93,

When the Levee Breaks, James Denning, CE Jan. 94, p38-41.

Flood stages

Riparian Wetlands and Flood Stages, F. Douglas Shields, Jr. and Charles M. Cooper, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p351-355.

The Summer of 1993 Floods Lower Missouri River, William H. Espey, Jr., Leo R. Beard and John E. Reinfurt, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p628-633.

Flooding

- 1993 Ground-Water Flooding in the Havana Area, Adrian P. Visocky, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p608-612.
- An Alternative Equation for the Mean Velocity in Gravel-Bed Rivers and Mountain Torrents, Dieter Rickenmann, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p672-676.
- Analysis of Selected Prototype Wave and Runup Data, Todd L. Walton, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p913-917.
- Comparison of Infiltration Equations Using Flooding Infiltrometer Data, David B. Thompson and Margaret Medellin, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1090-1094.
- Environmental Effects of Flooding at a USCG Base, Virginia L. Bretzke and Michael J. Donnelly, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p781-787.
- Estimation of Vo_{max}, and Identification of the Iniki Overwash Line on Kaua'i, C. H. Fletcher, T. A. Schroeder, G. M. Barnes, B. M. Richmond and M. A. Hampton, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p746-755.
- An Evaluation of the Impact of Recent Flooding on the Operation of a Groundwater Extraction and Treatment System at a Superfund Site, Kerry L. Gavett, Michael J. Fiore and Eric J. Meyer, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p764-771.
- Free surface flow modelling on a complex topography, Mohamed Naaim and Gerard Brugnot, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p298-308.
- Georgia Dams Hit Hard in Flooding from Tropical Storm, NE Aug. 94, p5.
- Hurricane Iniki, A Hindcast, Winds, Windwaves, Swells, Storm Surge, and Wave Run-Up, C. L. Bretschneider, J. D. Agrawal, N. C. Carmella and K. A. Wohlmut, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p772-781.
- Local Sewer Rehabilitation Metro Chicago, William A. Macaitis and Robert Kuhl, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p111-122.
- Measurement and Hindcast of Hurricane Iniki Coastal Inundation, Steven Yamamoto, Scott Sullivan and Eiji Nakazaki, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p756-771.
- Minimizing the Probable Maximum Flood, Mark A. Woodbury, Douglas T. Eberlein and Nicholas Pansic, CE June 94, p64-65.
- Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinar, ed. and Luigi Natale, ed., 1994, 0-7844-0035-0, 375pp.
- Money-Saving Model, Carson Mettel, David McGraw and Susanne Strater, CE Jan. 94, p54-56.
- A new approach for the estimation of extreme roughness in torrents by Hydraulic and Photogrammetry, Hanspeter Hodel, Thomas P. Kersten and Isidor Storchenegger, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p697-701.
- A New Formula for Mean Velocity in Torrents, Hanspeter Hodel and Isidor Storchenegger, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p667-671.

- New Methods for Modelling Dam-Break Wave, A. Paquier, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p.229-240.
- The Numerical Simulation of Wetting and drying Areas using Riemann Solvers, G. W. Tchamen and R. Kahawita, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p127-140.
- Predicting the Impact from Significant Storm Events on a Hazardous Waste Site, Udai P. Singh, Neal P. Dixon and J. Stephen Mitchell, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p772-780.
- Transmission Losses from Ephemeral Stream in Arid Region, Mohamed J. Abdulrazzak and Ali U. Sorman, IR May/June 94, p669-675.
- Two-Dimensional Modelling of Flow in the River Sava, Rudi Rajar and Matjaž Četina, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p309-323.
- Two-Dimensional Water Flood and Mudflow Simulation, J. S. O'Brien, P. Y. Julien and W. T. Fullerton, HY Feb. 93, p244-261.
- Uncertainty and Time Preference in Shore Protection, Kevin O'Grady and Leonard Shabman, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p136-154.
- Unsteady Spillway Inlet Conditions at the Weatherford Water Supply Reservoir, Steven L. Barfuss, J. Paul Tullis and Stuart R. Wilson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p558-562.

Floods

- 1993 Mississippi Record Stages and Levee Failures, Sally McConkey, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p603-607.
- Analysis of the Torrent Lava Flow Movement and Its Computations One Example Applied Investigation of Disastrous Torrent Flood, Zoran Gavrilović, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p550-651.
- Bias in Regression Estimates of Manning's n, Kenneth L. Wahl, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p727-731.
- Bridge Scour During the 1993 Floods in the Upper Mississippi River Basin, Gordon G. Barksdale, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p21-25.
- Climatic Perspective on the 1993 Mississippi R. Flood, Kenneth E. Kunkel, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p600-602.
- Computing Two Dimensional Flood Propagation with a High Resolution Extension of McCormack's Method, F. Alcrudo and P. García Navarro, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p3-17.
- Contraction Scour at a Bridge over the lowa River, Edward E. Fischer, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p31-35.
- Effects of Flow Duration on Local Scour at Bridge Piers in New York, Gerard K. Butch and Richard Lumia, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p46-50.
- Evaluating Risk of Extreme Events for Univariate-Loss Functions, James H. Lambert and Duan Li, WR May/June 94, p382-399.
- Evaluation of Supercritical/Subcritical Flows in High-Gradient Channel, Douglas J. Trieste, HY Aug. 92, p1107-1118.
- Experimental Study on Turbulent Structures in Unsteady Open-channel Flows, Iehisa Nezu, Akihiro Kadota and Hiroji Nakagawa, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p185-194.

Factors Affecting Accuracy of Slope-Area Discharge De-termination of the September 1992 Flood in Raven Fork, Western North Carolina, W. Harold Eddins and Thomas J. Zembrzuski, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p645-649.

Prequency of the 1993 Flood in the Upper Mississippi River Basin, W. O. Thomas, Jr. and D. A. Eash, (Hy-draulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p16-20.

Historic-Flood Evaluation and Research Needs in Mountainous Areas, Robert D. Jarrett, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p875-879.

Historical Trends in Flood Discharges on the Upper Mississippi River, H. Vernon Knapp, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p618-622

Influence of a Sand Layer on Headcut Advance, Kerry M. Robinson and Gregory J. Hanson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p431-435.

An Interactive Regional Regression Approach to Estimating Flood Quantiles, Gary D. Tasker and Raymond M. Slade, Jr., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p782-785.

Jury Verdict: Frequency versus Risk-Based Culvert De-sign, Gary L. Lewis, WR Mar./Apr. 92, p166-184.

Luo, Ming, Weilin Xu and Huasheng Liao, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1009-1013.

The Miller City Levee Break and Incipient Meander Cutoff, K. A. Oberg and R. B. Jacobson, (Hydraulic En-

Cutoff, R. A. Oberg and R. B. Jacosson, (rydrautic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p623-627.

Modelling of Flood Wave Propagation Over Flat Dry Areas of Complex Topography in Presence of Different Infrastructures, P. Molinaro, A. Di Filippo and F. Ferrari, (Modelling of Flood Personautican Over Initially, Des (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p209-228.

Monitoring and Modeling the Transport of Coarse Single Particles in Mountain Rivers, Peter Ergenzinger and Carmen de Jong. (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p634.

Mulitlevel Model for Gage and Paleoflood Data, Ellen W. Stevens, WR July/Aug. 94, p444-457. A New Set of Equations for Very Shallow Water and Partially Dry Areas Suitable to 2D Numerical Models, A. Defina, L. D'Alpaos and B. Matticchio, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p72-81.

Opening Remarks by Robert L. Wiegel, Robert L. Wiegel, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p194-197.

Problems with Indirect Determinations of Streamflows in Steep, Desert Stream Channels, Patrick A. Glancy and Rhea P. Williams, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p635-639.

Real-Time Data Collection of Scour at Bridges, David S. Mueller and Mark N. Landers, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p104-113.

Relation Between Largest Known Flood Discharge and Elevation in Montana, Charles Parrett and Stephen R. Holnbeck, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p870-874

Relationships between *n*-Day Flood Volumes for Infrequent Large Floods, James B. Balocki and Stephen J. Burges, WR Nov./Dec. 94, p794-818.

Budges, Walidity of Modeling Sedimentation and Debris Flow Hazards Over Initially Dry Areas, Douglas L. Hamilton, Robert C. MacArthur and Vito A. Vanoni, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p342-356.

Reliability of Flood Warning Systems, Roman Krzyszto-fowicz, Karen S. Kelly and Dou Long, WR Nov/Dec. 94, p906-926.

Runoff Detention for Flood Volume or Erosion Control, A. Osman Akan and Edward N. Antoun, IR Jan./Feb. 94,

Proof-16s.

Seasonal Distributions of Peak Flows From Small Agricultural Watersheds, James V. Bonta and A. Ramachandra Rao, IR Mar./Apr. 94, p422-439.

Station-Year Approach: Tool for Estimation of Design Floods, Henri Garros-Berthet, WR Mar./Apr. 94, p135-

Step Pool Geometry and Flow Characteristics in Low-Sediment-Storage Channel Beds, Tamir Grodek, Moshe Inbar and Asher P. Schick, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p819-823.

Storm and Entrainment Effects on Tributary Sediment Loads, Deborah H. Lee, Keith W. Bedford and Chieh-Cheng J. Yen, HY Jan. 94, p81-103.

The Summer of 1993 Floods Lower Missouri River, William H. Espey, Jr., Leo R. Beard and John E. Reinfurt, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p628-633.

Turbulent Velocities in a Mountain River, Graeme M. Smart, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p844-

Use of FESWMS-2DH for the Attaway Road Bridge Repair Project, M. A. Ports, D. D. Dee, Jr. and J. Warren, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p579-583.

Using Pen Computers in Post-Disaster Insurance Claim Settlements, Raja R. A. Issa, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2145-2148.

When the Levee Breaks, James Denning, CE Jan. 94, p38-

"Deepwater Waves and Tsunami Produced by the Impacts of Small Asteroids", J. G. Hills, (Engineering, Construc-tion, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1365-1371.

Retaining and Flood Walls, U.S. Army Corps of Engineers, 1994, 0-87262-968-6, 320pp.

West Columbus, OH LPP Gate Closure Analysis - A Study of the Requirements for Multiple Closures, Kenneth C Halstead and Surya Bhamidipaty, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p472-476.

Floors

An Application of a Coulomb Damped Mass Device, Apostolos Fafitis and Debra S. Larson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p399-404.

Cyclical Behavior of Welded Steel Shear Studs, Kurt Michael McMullin and Abolhassan Astaneh-Asl, (Structures Congress XII, N. C. Baker, ed. and Barry J. Lood-

no, ed., 1994), p1024-1029.

Design and Construction of Post-Tensioned Concrete Floor Systems, D. Kirk Harman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1403-

Dwell-Time Effects of Low-Floor Bus Design, Jonathan C. Levine and Gwo-Wei Torng, TE Nov./Dec. 94, p914-

Floor to Wall Anchors in Historic Brick Buildings, W. Bradford Cross and Nicholas P. Jones, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1569.

GLG Grand, Atlanta Design and Construction, Martin R. Ocon, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p25-30.

Guidelines to Minimize Floor Vibrations from Building Occupants, Sarah E. Mouring and Bruce R. Ellingwood, ST Feb. 94, p507-526.

Object-Oriented Structural Analysis with Substructures, Richard Sause and Jun Song, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p153-160.

Reliability of Light-Gage Metal Joist Hangers, Francis O. Berkoh and Juan J. Salinas, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p906-911.

Representation of Vertical Constraints Knowledge for Scheduling Multi-Story Projects, Walid Y. Thabet and Yvan Beliveau, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p349-355. Rigid Beam-To-Column Connection Detail for Circular Composite Columns, Atorod Azizinamini and Y. Shekar, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1155-1160.

Theoretical and Experimental Evaluation of FRP Components and Systems, Sotiris N. Sotiropoulos, Hota V. S. GangaRao and Ahmed N. K. Mongi, ST Feb. 94, p464-485.

Use of Composite Timber-concrete Floors in Residential Buildings, B. H. Ahmadi and M. P. Saka, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p508-513.

All-Risk Policy Offers No Protection Against Alleged Negligence, CE Oct. 94, p27

Analysis of Structural Debris Generation and Disposal After Hurricane Andrew: Technical Perspective, Berrin Tansel, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p533-538.

Analyzing Wave and Storm Surge Impacts from Hurricane Andrew on the Dade County Beach Erosion Control and Hurricane Protection Project, Kimberley A. Taplin and Jon M. Hubertz, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Royald A. Cook, ed.

and Mehrdad Sotani, ed., 1994), p587-596. Aquifer Storage and Recovery in the Floridan Aquifer Sys-tem of South Florida, Albert Muniz and William B. Ziegler, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p69-72.

Are Building Codes and/or Enforcement Adequate for Hurricane Protection? Lindsey E. Carter and Gary G. Nichols, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p626-631.

Assessment of BNR Systems in Florida, Richard O. Mines, Jr. and C. William Woods, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p436-443.

Averaging Time and Maximum Speeds in Hurricanes, Naveen Aerrabotu and Timothy A. Reinhold, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p467-472. Bouncy Turf Tested in Soccer Field, CE Nov. 94, p86.

Causes of Roof Covering Damage and Failure Modes: Insights Provided by Hurricane Andrew, Thomas Lee Smith, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p303-312.

Concurrency-Management Practices in Florida: Comparative Assessment, Greg Stuart, UP June 94, p59-73.

Critical Issues in Post Disaster Code Enforcement, Wilson C. Barnes and Jose D. Mitrani, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994),

Debris Removal Operations Following Hurricane Andrew, Rex M. Holmlin, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p539-547.

Development of the Tampa Bay Tidal Current Atlas, Kurt W. Hess, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p489-499.

Directional Wave Data - Measurements and Modeling Coast of Florida Erosion and Storm Effects Study, Thomas D. Smith and Jon M. Hubertz, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p76-89.

Early Voided-Slab Structure was Made From Conventional Concrete (ltr), CE Aug. 94, p26.

Economic Risk Analysis of Building Codes, James D. En-glehardt, Chengjun Peng and Ahmad Namini, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p674-683.

Evaluation of Laboratory Limerock Bearing Ratio Test on Pavement Soils in Florida, W. Virgil Ping and Zhiliang Yu, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p223-230.

Evapotranspiration by Young Florida Flatwoods Citrus Trees, Brian J. Boman, IR Jan./Feb. 94, p80-88.

Failure of Residential Building Envelopes as a Result of Hurricane Andrew in Dade County, Florida, Clifford Oliver and Chris Hanson, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p396-508.

A Field and Modeling Study of Residual Circulation in Sarasota Bay and Tampa Bay, Florida, Y. P. Sheng and S. J. Peene, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p641-655.
General Contract Documents Called for Arbitration, CE

May 94, p30.
A GIS Foundation Example, George Massey, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2175-2182.

Ground-Penetrating Radar For Salt-Affected Soil Assess ment, Sun F. Shih and Don L. Myhre, IR Mar./Apr. 94, p322-333.

History of Entrance Channel Dredging and Disposal Operations: St. Marys, Georgia/Florida, Joan Pope, J. Bailey Smith and Laurel T. Gorman, (*Dredging '94*, E. Clark

 Siniti and Lauler 1. Johnson, (Dreaging 94, E. Clark
 McNair, Jr., ed., 1994), p906-917.
 How Tall Transmission Poles Survived Hurricane Andrew,
 Kou-Roung Chang, (Hurricanes of 1992: Lessons
 Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p377-386.

Hurricane Andrew and the Central and Southern Florida Project, James W. Vearil and Christopher T. Smith, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p597-606.

Hurricane Andrew Induced Damage to Florida Power & Light's Transmission System, C. Jerry Wong, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p387-396.

Hurricane Andrew - Structural Performance of Buildings in South Florida, Edward L. Keith and John D. Rose, CF Aug. 94, p178-191.

Impact of Hurricane Andrew on Electrical Generating Fa-cilities, W. F. Brannen, R. L. Adams and J. E. Sheetz, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad So-

Influence of Sikes Cut on Apalachicola Bay, FL; A Preliminary Analysis from a Three-Dimensional Perspective, am K. Jones, Boris Galperin, Robert H. Weisberg and T. S. Wu, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p351-365.

Initial Dilution of Southeast Florida Ocean Outfalls, John R. Proni, Hening Huang and William P. Dammann, HY Dec. 94, p1409-1425.

Jointless Pipeline Spans Pensacola Bay, CE Sept. 94, p96.
Kissimmee River Restoration Study, Hsieh Wen Shen,
Guillermo Tabios, III and James A. Harder, WR May/ June 94, p330-349.

Life After Andrew on Florida's Tumpike, Massoud Mora-di, (Hurricanes of 1992: Lessons Learned and Implica-tions for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p558-566.

Modeling Circulation and Salinity Transport in the Indian River Lagoon, M. Z. Moustafa and J. M. Hamrick, (Estuarine and Coastal Modeling III, Malcolm L. Spauldin ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p381-395. Non-Point Source Pollution Reduction, J. Thomas Franques and Rhonda L. Townsend, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Ru-

mer, ed., 1994), p1252-1256.

Nowcast System Development for the Straits of Florida, Christopher N. K. Mooers and Dong-Shan Ko, (Estua-rine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p158-171.

One Engineer's Wish List for Hurricane Hazard Mitigation, Ronald F. Zollo, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p268-277.

Performance of Spun Prestressed Concrete Poles During Hurricane Andrew, Fouad H. Fouad, Norman L. Scott, Elizabeth Calvert and Michael Donovan, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p362-376.

Performance of Traffic Signals and Signs in Hurricane Andrew, Frances K. Ashley, Ronald A. Cook and Marc I. Hoit, (Hurricanes of 1992: Lessons Learned and Impli-cations for the Future, Ronald A. Cook, ed. and

Mehrdad Sotani, ed., 1994), p415-423.

Port Authority's Role in Inlet Management and Beneficial Use of Dredged Material, Malcolm E. McLouth, Joseph Lapolla and Kevin Bodge, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p971-980.

Present Character of Area May Influence Future Zoning,

CE Feb. 94, p27.

Regional Optimization of Non-Point Source Load Reduction, J. Thomas Franques and Rhonda L. Townsend, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p262-266.

Restoring the Everglades, James Best Jackson, Larry Fink and Gary Goforth, CE Mar. 94, p52-55.

Role of Vortex-Excited Vibrations in Damage to Power Poles in Hurricane Andrew, Richard A. Skop and Ahmad H. Namini, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p567-576.

Shelters for Hurricane Refuge, Herbert S. Saffir, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed.,

1994), p241-248.

Simulation of Flushing in Indian River Lagoon Using 1-D and 3-D Models, Y. P. Sheng, H. K. Lee and C. E. Demas, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p366-380

Start-ups, CE Sept. 94, p8.

Tampa Hopes to Stop City From Going Down the Drain, CE Mar. 94, p10,12

Turning Up the Heat to Tame Sludge, ET Dec. 94/Jan. 95, p8.

TV Tower Designed for Winds Up to 145 mph, CE Apr. 94, p107.

Uncertainties in the Prediction of Hurricane Windspeeds, L. A. Twisdale, P. J. Vickery and M. B. Hardy, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p706-715.

US Hurricanes of 1992 an Australian Perspective, Greg Reardon and Doug Meecham, (Hurricanes of 1992: Les sons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p642-651.

Wind Action on Highrise Structures: Codes - Wind Tunnel Action of rightise structures. Codes - White Failure, Reality, Nicholas Isyumov, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p430-445.

Broad-Crested Weir, Willi H. Hager and Markus Schwalt, IR Jan./Feb. 94, p13-26.

Criteria for Evaluating Flow Classes in Alluvial Channels, Prabhata K. Swamee and Chandra Shekhar P. Ojha, HY May 94, p652-658.

Depth-Averaged Flow Model in Curvilinear Coordinates, Hector R. Bravo, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p517-521.

Estimation of Mean Flow Velocity in Ice-Covered Channels, Martin J. Teal, Robert Etterna and John F. Walker,

ners, Martin J. Teal, Robert Ettema and John F. Walker, HY Dec. 94, p1385-1400. Flow Past Two-Dimensional Lateral Slot, A. S. Ramamurthy, Weimin Zhu and B. L. Carballada, EE Nov./Dec. 94, p1632-1638.

Hydraulic Age Distribution in Perfectly Mixed Non-Steady-State Reactors, Marcelo Juanico and Eran Friedler, EE Nov./Dec. 94, p1427-1445.

Improvement of Flow in Final Settling Tanks, Ulrich Bretscher, Peter Krebs and Willi H. Hager, EE May/June 92, p307-321.

Jet Flow on Stepped Spillways, M. R. Chamani and N. Ra-jaratnam, HY Feb. 94, p254-259.

Mesh Generation for Estuarine Flow Modeling, Norman L. Jones and David R. Richards, WW Nov./Dec. 92, p599-

Multi-Reservoir Systems Optimization by the Aggregation/Decomposition Methodology, M. Bessa, K. Pon-nambalam and A. Bogobowicz, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p192-196.

Need for New Standards to Prevent Deposition in Wastewater Sewers, Chandra Nalluri and Wojciech Da-

browski, EE Sept./Oct. 94, p1032-1043.

Non-Point-Source Pollution from Interrill Flow Areas, A. Parr, S. Limback, B. McEnroe and S. Zou, IR Nov./Dec. 94, p1056-1066.

Role of Urban Storm-Flow Volume in Local Drainag Problems, Bruce K. Ferguson and Tamas Deak, WR July/Aug. 94, p523-530.

Simulation of Flow in Circular Clarifiers with and without Swirl, László Szalai, Peter Krebs and Wolfgang Rodi, HY Jan. 94, p4-21.

Subcritical Flow Over Rectangular Side Weir, Prabhata K. Swamee, Santosh K. Pathak, Mukesh Mohan, Sanjai K. Agrawal and Masoud S. Ali, IR Jan./Feb. 94, p212-217.

Supercritical Flow in Circular-Shaped Side Weir, Willi H. Hager, IR Jan./Feb. 94, p1-12.

Tests for Flow along Vertically Stratified Porous-Media Interfaces, Ronald B. Manila, Jr. and J. Jeffrey Peirce, EE May/June 94, p527-542.

An Updated Fracture-Flow Model for Total-System Performance Assessment of Yucca Mountain, John H. Gauthier, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1663-1670.

Flow characteristics

A Decision Support System for Administering Water Rights in Alluvial Aquifer, John C. Tracy, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p287-

Discharge Coefficient of Rectangular Side Weirs, R. Singh, D. Manivannan and T. Satyanarayana, IR July/Aug. 94,

p814-819.

Flushing Flows for the Water Manager, Robert T. Milhous, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p226-229.

Measurement of Turbulent Properties in a Natural System, Jörg Imberger and Roger Head, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p1-20.

Recent Advances In Well Hydraulics, Otto J. Helweg and S. Sunita, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel,

ed., 1994), p608-611.

Risk-Based Analysis for Flood Damage Reduction, Darryl W. Davis and Michael W. Burnham, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p194-200.

Self-Aerated Flows on Chutes and Spillways, H. Chanson, HY Feb. 93, p220-243.

Strange Attractors and Chaos in Wastewater Flow, Donald I. Angelbeck and Rafic Y. Minkara, EE Jan./Feb. 94, p122-137

Turbulent Boundary Layer Over Flat Plate with Rigid and Flexible Surfaces, M. S. Abu Sharekh, S. K. Pathak, G. L. Asawa and P. D. Porey, EM Aug. 94, p1675-1695.

Flow coefficient

Headloss Analysis for Modern Piping Systems, L. Gregg Horn, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p10-27.

Changing Dam Operating Criteria to Accommodate Aquatic Biological Diversity, Daniel F. Luecke, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p218-221.

Characteristics of Circular-Crested Weir, Amruthur S. Ramamurthy and Ngoc-Diep Vo, HY Sept. 93, p1055-

Constraining Local 3-D Models of the Saturated-Zone, Yucca Mountain, Nevada, G. E. Barr and Sharon A. Shannon, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1814-1821.

Flow and Sediment Transport at River Diversions, Yalin

Flow and Sediment Transport at River Diversions, Yalin Wang, Brian Barkdoll and A. Jacob Odgaard, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1060-1064.

How to Improve Control of Flow and Reduce Cavitation, Ergun Bakall, Michael T. Stift and Paul W. Johnson, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p89-103.

Momentum Model of Flow Past Weir. Amruthur S. Momentum Model of Flow Past Weir.

Momentum Model of Flow Past Weir, Amruthur S. Ramamurthy, Ngoc-Diep Vo and German Vera, IR Nov./Dec. 92, p988-994.

Regulation of Flow Downstream of Weirs, Boualem Hadjerioua, Tony Rizk, Emmett M. Laursen and Gary Hauser, HY Mar. 94, p347-360.

Side-Weir Analysis Using Elementary Discharge Coefficient, Prabhata K. Swamee, Santosh K. Pathak and Masoud S. Ali, IR July/Aug. 94, p742-755.

Flow distribution

Homogeneity Tests Based Upon Gumbel Distribution, Heinz D. Fill and Jery R. Stedinger, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p790-793.

Mulitlevel Model for Gage and Paleoflood Data, Ellen W.

Stevens, WR July/Aug. 94, p444-457.

Flow duration curves

Effects of Flow Duration on Local Scour at Bridge Piers in Effects of Flow Duration on Local Scour at Bridge Piers in New York, Gerard K. Butch and Richard Lumia, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p46-50.
Flow-Duration Curves I: New Interpretation and Confidence Intervals, Richard M. Vogel and Neil M. Fennessey, WR July/Aug. 94, p485-504.

A Regional Model of Daily Streamflow for the Northeast United States, Neil M. Fennessey and Richard M. Vogel, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p794-797.

Flow measurement

Acoustic-Doppler Velocimeter (ADV) for Laboratory Use, Atle Lohrmann, Ramon Cabrera and Nicholas C. Kraus, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p351-365.

Analysis of the Torrent Lava Flow Movement and Its Computations - One Example Applied Investigation of Disastrous Torrent Flood, Zoran Gavrilović, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p650-651.

Application of a Needle Probe in Measuring Local Parameters in Air-Water Flow, A. R. Zarrati and J. D. Hardwick. (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p296-300.

Characteristics of Circular-Crested Weir, Amruthur S. Ramamurthy and Ngoc-Diep Vo, HY Sept. 93, p1055Comparison of Current Meters Used for Stream Gaging, Janice M. Fulford, Kirk G. Thibodeaux and William R. Kaehrle, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p376-385.

A Computerized Open Channel Flow Measurement Device, Stan E. Malinky, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation,

Clifford A. Pugh, ed., 1994), p27-36.

Correct Form of Hall Technique for Border Irrigation Advance, A. Al-Azba and T. Strelkoff, IR Mar./Apr. 94, p292-307.

Correction for Settlement in Submerged Parshall Flumes, S. Abt, A. Genovez and B. Florentin, IR May/June 94,

p676-682.

Developing Air Concentration and Velocity Probes for Measuring Highly-Aerated, High-Velocity Flow, Kath-leen H. Frizell, David G. Ehler and Brent W. Mefford, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p268-277

Effects of Lateral Heading Flow Steadiness on Lateral Spillage, Eduardo A. Latimer, Michael R. Petersen and Andrew A. Keller, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry

N. Tuvel, ed., 1994), p115-118.

Effects of Simulated Ice on the Performance of Price Type-AA Current Meter Rotors, Janice M. Fulford, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p251-258.

Filling of Pipelines with Undulating Profiles, Chyr Pyng Liou and William A. Hunt, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed.,

1994), p104-118.

Flow Analysis Used to Diagnose Pipe Capacity and Sewer Overflow Problems in Sydney, Australia, Patrick A. Hayes, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p439-451.

Flow-Measurement Structures of Compound Cross Section for Rivers, Mustafa Gögüs and Dogan Altınbilek, IR

Jan./Feb. 94, p110-127..

Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994,

0-7844-0036-9, 546рр.

Instrumentation Needs and Possibilities: A Dialogue Between Suppliers and Users, Robert Ettema and Vito Lat-kovitch. (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p539-540.

Interceptor Inspection and Rehabilitation Program, William A. Macaitis and Amreek Paintal, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p123-142.

Laboratory and Field Evaluation of Acoustic Velocity Meters, Tracy Vermeyen, (Fundamentals and Advance-ments in Hydraulic Measurements and Experimentation,

Clifford A. Pugh, ed., 1994), p43-52.

Measuring Air Concentration in Flowing Air-Water Mixtures, Boualem Hadjerioua, Tony A. Rizk, Emmett M. Laursen and Margaret S. Petersen, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p289-295.

Momentum Model of Flow Past Weir, Amruthur S. Ramamurthy, Ngoc-Diep Vo and German Vera, IR Nov./Dec. 92, p988-994.

New Acoustic Meter for Measuring 3D Laboratory Flows, Nicholas C. Kraus, Atle Lohrmann and Ramon Cabrera, HY Mar. 94, p406-412.

Practical Constant-Accuracy Linear Weir, K. Keshava Murthy and M. N. Shesha Prakash, IR May/June 94,

p550-562.

Pressure-Time Flow Rate in Low Head Hydro Plants, Charles W. Almquist, David B. Hansen, Gerald A. Schohl and Patrick A. March, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p445-453.

Recalibration of Parshall Flumes at Low Discharges,

Recailoration of Parshall Flumes at Dow Discharges, Steven J. Wright, Blake P. Tullis and Tamara M. Long, IR Mar./Apr. 94, p348-362. Results of Parshall Flume Test, Fred W. Blaisdell, IR

Mar./Apr. 94, p278-291.

Shingle Movement Under Waves & Currents: An Instrumented Platform for Field Data Collection, George Voulgaris, Michael P. Wilkin and Michael Collins, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p894-

Simultaneous Flow Visualization and Hot-Film Measurements, Fabián López, Yarko Niño and Marcelo García, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed.,

1994), p490-499

Testing Turbine Aeration for Dissolved Oxygen Enhance-ment, Tony L. Wahl, Jerry Miller and Doug Young, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed.,

1994), p425-434.

Verification of Lake Superior Outflow Equations, Scott J. Thieme, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p462-466

Flow patterns

An Analysis of Flow Velocity Profiles, Stream Bed Roughness, and Resistance to Flow in Natural Gravel Bed Streams, Normand E. Bergeron, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p692-696.

Boundary Conditions and Flow Patterns in a Mountain River, Andrew J. Miller, Diane M. L. Mas, James A. Smith and Wei-Hao Chung, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p762-766. Effects of Gravity Currents in Circular Secondary Clarifiers, C. van Marle and C. Kranenburg, EE July/ Aug. 94, p943-960.

Flow patterns in a mountain stream, Lisa C. Hubbard and Colin R. Thorne, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p737-741.

Modeling Regional Flow and Flow to Drains, G. M. Pohll and J. C. Guitjens, IR Sept./Oct. 94, p925-939.

Reliability and Validity of Modeling Sedimentation and Debris Flow Hazards Over Initially Dry Areas, Douglas L. Hamilton, Robert C. MacArthur and Vito A. Vanoni, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994),

Routing Debris Flows with Particle Segregation, Tamotsu Takahashi, Hajime Nakagawa, Tatsuo Harada and Yousuke Yamashiki, HY Nov. 92, p1490-1507.

Borehole Fluid Dynamic Temperature Logging to Evaluate Fracture Hydraulic Properties, C.-F. Tsang, F. V. Hale, P. Bluemling and S. Vomvoris, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p2655-2659.

Diffusion Hydrodynamic Model of Shallow Estuary, G. L. Guymon, M. N. Khan, M. Collins and T. V. Hromadka,

WR Mar./Apr. 94, p253-266.

Downstream Control Algorithm for Irrigation Canals, Fubo Liu, Jan Feyen and Jean Berlamont, IR May/June 94, p468-483

Effect of Flow Velocity on Sediment Oxygen Demand: Theory, Yoshiyuki Nakamura and Heinz G. Stefan, EE Sept./Oct. 94, p996-1016.

Flow Capacity of Rehabilitated Sanitary Sewers, Kenneth K. Kienow, Karl E. Kienow and Paul E. Kienow, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p28-42.

Hydraulic Conditions Required to Move Unanchored Residue Materials, J. E. Gilley, E. R. Kottwitz and G. A. Wieman, IR May/June 94, p591-606.

Instantaneous-Unit Sediment Graph, N. S. Raghuwanshi, R. A. Rastogi and Santosh Kumar, HY Apr. 94, p495-503.

Measuring Water in Trapezoidal Canals, Zohrab Samani and Henry Magallanez, IR Jan./Feb. 93, p181-186.

Normal-Depth Equations for Irrigation Canals, Prabhata K. Swarnee, IR Sept./Oct. 94, p942-948.

Numerical Approach to Clarifier Operation According to Flux Theory, Bruce J. Alderman, Thomas L. Theis and Anthony G. Collins, EE May/June 94, p670-676.

Pressure-Time Flow Rate in Low Head Hydro Plants, Charles W. Almquist, David B. Hansen, Gerald A. Schohl and Patrick A. March, (Fundamentals and Advancements in Hydraulic Measurements and Experimen-

tation, Clifford A. Pugh, ed., 1994), p445-453.

Recalibration of Parshall Flumes at Low Discharges, Steven J. Wright, Blake P. Tullis and Tamara M. Long, IR Mar/Apr. 94, p348-362.

Side-Weir Analysis Using Elementary Discharge Coefficient, Prabhata K. Swamee, Santosh K. Pathak and Masoud S. Ali, IR July/Aug. 94, p742-755.

Subcritical Flow Over Rectangular Side Weir, Prabhata K. Swamee, Santosh K. Pathak, Mukesh Mohan, Sanjai K. Agrawal and Masoud S. Ali, IR Jan./Feb. 94, p212-217.

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An Alternative Equation for the Mean Velocity in Gravel-Bed Rivers and Mountain Torrents, Dieter Rickenmann, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p672-676.

An Analysis of Flow Velocity Profiles, Stream Bed Roughness, and Resistance to Flow in Natural Gravel Bed Streams, Normand E. Bergeron, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p692-696.

At-A-Site Mountain River Flow Resistance Variation, James C. Bathurst, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

p682-686.

Design of Manning's-Rougness-Coefficient Study in New York State, William F. Coon, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p677-681.

Dimensionally Homogeneous Manning's Formula, Ben Chie Yen, HY Sept. 92, p1326-1332.

Evaluating Flow Resistance Using Height of Roughness Protrusions, Ivana Marešová, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p712-716.

Evaluation of Methods for Predicting Bend Loss in Mean-dering Channels, C. S. James, HY Feb. 94, p245-253.

Flow Capacity through Wide and Submerged Vegetal Channels, M. W. Abdelsalam, A. F. Khattab, A. A. Khalifa and M. F. Bakry, IR Sept./Oct. 92, p724-732.

Flow Resistance of High-Gradient Gravel Channels, R. G. Millar and M. C. Quick, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p717-721.

Historic-Flood Evaluation and Research Needs in Mountainous Areas, Robert D. Jarrett, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p875-879.

Roughness Coefficient in Mountain Rivers, Alfonso Ugarte and Manuel Madrid, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p652-656.

Roughness Coefficients for High-Gradient Channels in New York State, William F. Coon, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p722-726.

Sheet Flow Resistance of Asphaltic Pavements, Joseph R. Reed, John C. Warner and Richard S. Huebner, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1100-1104.

Step-Pool Streams: An Adjustment to Maximum Flow Resistance, Athol D. Abrahams, Gang Li and Joseph F. At-kinson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p815-

Supercritical Flows Versus Subcritical Flows in Natural Channels, Douglas J. Trieste, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p732-736. Uncertainties in Flow Modeling and Forecasting for Niagara River, Randy D. Crissman, Chao-Lin Chiu, Weizu Yu, Kazumasa Mizumura and Ion Corbu, HY Nov. 93, p1231-1250.

Flow separation
Flow Past Two-Dimensional Lateral Slot, A. S.
Ramamurthy, Weimin Zhu and B. L. Carballada, EE

Flow simulation

An Improved Design of Excluding Sediment into River Intake Structures, Wu-Sung Ke, Sue-Jen Wu and Che-Yuan Huang, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1193-

Simulating Effects of Highway Embankments on Estuarine Circulation, Jonathan K. Lee, Raymond W. Schaffranek and Robert A. Baltzer, WW Mar./Apr. 94, p199-218.

Flow visualization

Coherent Structures in Compound Open-Channel Flows by Making Use of Particle-Tracking Visualization Tech nique, Iehisa Nezu, Hiroji Nakagawa and Ken-ichi Saeki, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh,

ed., 1994), p406-415.
High-speed Video Analysis of Sediment-Turbulence Inter-action, Yarko Niño, Fabián López and Marcelo García, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed.,

1994), p213-222

Investigation of Saltating Particle Motions, Hong-Yuan Lee and In-Song Hsu, HY July 94, p831-845.

Simultaneous Flow Visualization and Hot-Film Measurements, Fabián López, Yarko Niño and Marcelo García, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p490-499.

Fast Foundation for Soft Clay, Joseph R. Hilton, Jr., Richard L. Novotny and Ronald E. Rager, CE Mar. 93, p62-65.

Fluid dynamics

Borehole Fluid Dynamic Temperature Logging to Evaluate Fracture Hydraulic Properties, C.-F. Tsang, F. V. Hale, P. Bluemling and S. Vomvoris, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2655-2659.

grant Committee, 1974, 2002-2009.
Besign Optimization of Coventry Municipal Solid Waste Incinerator, V. Nasserzadeh, J. Swithenbank, C. Schofield, D. W. Scott, A. Loader and A. Leonard, EE Nov/Dec. 94, p1615-1629.

A-Tough: A Multimedia Fluid-Flow/Energy-Transport Model for Fully-Coupled Atmospheric-Subsurface Interactions, Parviz Montazer, Dale Hammermeister and Joseph Ginanni, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2333-2340.

Alternative Formulation of Laterally Averaged Hydrodynamics, John Eric Edinger, Edward M. Buchak and Zhenyu Zhang, HY July 94, p886-890.

Case Study of Debris Flow, Robert W. Day, CF Aug. 94, p192-200.

CDR - A Chemical Solution to a Mechanical Problem, Gary E. Blizzard, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p172-

Combined Oscillatory and Steady Flow Over Ripples, K. I. Mahesha Ranasoma and John F. A. Sleath, WW July/

Aug. 94, p331-346.

Experimental Heat Transfer and Fluid Flow Over Drift-Emplaced Canisters, William G. Culbreth and Satish Pat-tisam, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p772-779

Filling of Pipelines with Undulating Profiles, Chyr Pyng Liou and William A. Hunt, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed.,

1994), p104-118.

Fluid Microconcrete - Properties and Application, M. Decter, D. Diamond, R. W. Lambe and D. Mueller, (Infrastructure: New Materials and Methods of Repair,

Kim D. Basham, ed., 1994), p725-734.

Mapping 2-D and 3-D Velocity Components in Circular Conduits Using an Electromagnetic Current Meter and a 5-Hole Pilot Probe, Joseph J. Orlins and Lawrence J. Swenson, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p53-61.

Minimum Thickness of Compacted Soil Liners: I. Stochastic Models, Craig H. Benson and David E. Daniel, GT Jan. 94, p129-152.

Minimum Thickness of Compacted Soil Liners: II. Analysis and Case Histories, Craig H. Benson and David E. Daniel, GT Jan. 94, p153-172

Newtonian Fluid Mechanics Treatment of Debris Flows and Avalanches, Bruce Hunt, HY Dec. 94, p1350-1363.

Spectral Analysis of Fluid Flow in Oscillating Grid Reactor, Leonard W. Casson, Desmond F. Lawler and David

107, Leonard W. Casson, Desimond F. Lawis and Boston G. Bogard, EM Feb. 94, p346-367.
Stochastic Modeling of Spatial Heterogeneities Condi-tioned to Hydraulic and Tracer Tests, Akhil Datta Gupta, D. W. Vasco, J. C. S. Long and Straits Vomvoris, (High Level Radioactive Waste Management, High Level Rad dioactive Waste Program Committee, 1994), p2624-2632

Subrepository Scale Hydrothermal Analysis in Support of Total System Performance Assessment at Yucca Mountain, Srikanta Mishra, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1202-1213.

Wave Interaction with Fluid Mud in Rectangular Trench, Francis C. K. Ting, WW Mar./Apr. 94, p154-178.

Fluid infiltration

Fluid Inclusion Studies of Calcite Veins from Yucca Mountain, Nevada, Tuffs: Environment of Formation, Edwin Roedder, Joseph F. Whelan and David T. Vaniman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1854-1860.

Paleoclimatic and Paleohydrologic Records From Secondary Calcite: Yucca Mountain, Nevada, Joseph F. Whelan, David T. Vaniman, John S. Stuckless and Richard J. Moscati, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2738-2745.

Fluid mechanics

Characteristics of Solitary Wave Breaking Induced by Breakwaters, Stéphan T. Grilli, Miguel A. Losada and Francisco Martin, WW Jan./Feb. 94, p74-92.

Macroscopic Conductivities for Flow of Bingham Plastics in Porous Media, George C. Vradis and Angelos L. Pro-

topapas, HY Jan. 93, p95-108.

Newtonian Fluid Mechanics Treatment of Debris Flows and Avalanches, Bruce Hunt, HY Dec. 94, p1350-1363. 'Shock Absorbers' for Cars and Quakes, ET Oct./Nov. 94, p5.

Fluid-structure interaction

Composite 2D/3D Hydroelastic-Analysis Method for

Composite 20/3D Hydroelastic-Analysis Method in Floating Structures, Xiling Che, H. Ronald Riggs and R. Cengiz Ertekin, EM July 94, p1499-1520. The Swept Sine Wave Testing Technique in Hydrodynamic Applications, Nicholas Haritos, Okey Nwogu and Andrew M. Cornett, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p533-546.

Wave Interaction with Semiporous Cylindrical Breakwater, M. K. M. Darwiche, A. N. Williams and K.-H. Wang,

WW July/Aug. 94, p382-403. Fluidized bed combustion

Cementing Action in Non-Portland Cement Systems: Sulpho-Pozzolanic and Silico-Pozzolanic Reactivity, R. T. Hemmings and E. E. Berry, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p329-336.

Characterization and Use of Fluidized-Bed-Combustion Coal Ash, Christina B. Behr-Andres and Neil J. Hutzler,

EE Nov./Dec. 94, p1488-1506.

Fluidized bed processing

Biodegradation of 2,4-Dinitrotoluene in a Two Stage System, S. L. VanderLoop, M. T. Suidan, M. A. Moteleb and S. W. Maloney, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p710-717.

Biological Upflow Fluidized Bed Denitrification Reactor Demonstration Project-Stamford, Ct. Jeannette Semon, Thomas Sadick, Dennis Palumbo, Richard Schede, Marylee Santoro, Maryin Schneider and Steven Lesando, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p428-435.

The Evaluation of Empty Bed Contact Time on the Bio-degradation of Pentachlorophenol using an Anaerobic aegradation of Pentachlorophenol using an Anaerobic GAC Fluidized Bed, Gregory J. Wilson, Julie A. Wagner, Amid P. Khodadoust, Makram T. Suidan and Richard C. Brenner, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p624-631.

Fluidized beds

Biological Fluidized Beds Containing Widely Different Bioparticles, Kyoung S. Ro and Johannes B. Neethling, EE Nov./Dec. 94, p1416-1426.

Design of Fluidizer Systems for Coastal Environment, Richard N. Weisman and Gerard P. Lennon, WW Sept./ Oct. 94, p468-487.

3D model verification for a groyne and harbor experiment, P. Mewis and K. -P. Holz, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p905-909.

Air Concentration Measurements in Highly-Turbulent Flow on a Steeply-Sloping Chute, James F. Ruff and Kathleen H. Frizell, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p999-1003.

Anomalous Dispersion Paradox in Shallow Water Gravity Waves Shoaling Over Slopping Bottom, S. Yu. Kuznetsov and N. S. Speransky, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p364-373.

Bed Load Roughness in Supercritical Flow, Scott E. Stonestreet, Ronald R. Copeland and Darla C. McVan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p747-751.

Calibration and Validation of a Cross-Shore Transport Model, J. Nicholson and B. A. O'Connor, (*Coastal Dynamics '94*, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p586-598.

Comparison of Headcut Advance Testing and Soil Test Results, Gregory J. Hanson and Robinson. Kerry M., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p426-430.

Correction for Settlement in Submerged Parshall Flumes. S. Abt, A. Genovez and B. Florentin, IR May/June 94, p676-682.

Design of Open-Channel-Contraction Transitions, Prabhata K. Swamee and Bharat C. Basak, IR May/June 94, p660-668.

Development of a Visual Method to Track the Movement of Hydrogen Bubbles in a Laboratory Flume, Athanasios N. Papanicolaou and Panayiotis Diplas, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p205-212.

Floating Cover Influence on Sediment Transport in Dune-Bed Channels, Brennan T. Smith and Robert Ettema, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1156-1160.

Flow-Measurement Structures of Compound Cross Section for Rivers, Mustafa Gögüs and Dogan Altınbilek, IR

Jan./Feb. 94, p110-127.

Formation and Propagation of Steep Waves: An Investigative Experimental Interpretation, P. G. Manciola, A. Mazzoni and F. Savi, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p283-297.

Ice Accumulation Rate and the Geometry of Ice Jams in River Bends, Gilberto E. Urroz and Robert Ettema, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p386-390.

The Impacts of Roughness Bars on the Mixing Processes, Jianlu Xu and Hsieh Wei Shen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p533-537.

Influence of a Sand Layer on Headcut Advance, Kerry M. Robinson and Gregory J. Hanson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p431-435.

Measurement and Prediction of Surface Shear Stress in Annular Flume, D. I. Graham, P. W. James, T. E. R. Jones, J. M. Davies and E. A. Delo, HY Sept. 92, p1270-1286.

Measuring Water in Trapezoidal Canals, Zohrab Samani and Henry Magallanez, IR Jan./Feb. 93, p181-186.

Objectives of Proposed Large Scale Experimental Facility (ESTEX), T. M. Parchure, W. H. McAnally, Jr. and G. Nail, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p809-

Optical Methods for Sediment-Laden Flows, R. N. Parthasarathy and M. Muste, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p223-232.

Physical Modelling of the Response of Shingle Beaches in the Presence of Control Structures, Tom T. Coates, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p924-

Recalibration of Parshall Flumes at Low Discharges, Steven J. Wright, Blake P. Tullis and Tamara M. Long, IR Mar./Apr. 94, p348-362.

Results of Parshall Flume Test, Fred W. Blaisdell, IR Mar./Apr. 94, p278-291.

Review of Works Using CRIEPI Flume and Present Work, Ryoichi Kajima and Tsutomu Sakakiyama, (Coastal Dy-namics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p614-627.

Second Order Irregular-Wave Generation in Flumes -Computation of Transfer Functions by an Asymptotic Summation Method, Hemming A. Schäffer, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p784-797.

Sediment Feed and Recirculating Flumes: Fundamental Difference, Gary Parker and Peter R. Wilcock, HY Nov. 93, p1192-1204.

Step-Pool Streams: An Adjustment to Maximum Flow Resistance, Athol D. Abrahams, Gang Li and Joseph F. At-kinson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p815-

A Surfzone Parameter Sensitivity Analysis on LIP11D Sus-Surlivie ratamient and Return Flow Measurements, G. Mocke, A. Reniers and G. Smith (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p571-585.

Oxygen from Lunar Soil via Fluorination, Wolfgang Seboldt, Stephan Lingner, Stephan Hoernes and Wolfgang Grimmeisen, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1210-1219.

Bed Material and Numerical Modeling in a Gravel/Cobble Bed Stream, Robert T. Milhous, Russell A. Dodge and Perry L. Johnson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

Circulation and Flushing in Casco Bay, Maine, Bin Gong and Bryan R. Pearce, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1039-1046.

Remediation of Contaminated Soils by Solvent Flushing, Denie C. M. Augustijn, Ron E. Jessup, P. Suresh C. Rao and A. Lynn Wood, EE Jan./Feb. 94, p42-57.

Simulation of Flushing in Indian River Lagoon Using 1-D and 3-D Models, Y. P. Sheng, H. K. Lee and C. E. Demas, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p366-

Flutter

Finite Element-Based Flutter Analysis of Cable-Suspended Bridges, Ahmad Namini, Pedro Albrecht and Harold Bosch, ST June 92, p1509-1526.

Multi-mode Aerodynamic Analysis of Long-Span Bridges, Nicholas P. Jones, Anurag, Jain and Robert H. Scanlan, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p894-899.

Fluvial hydrautics

Expansion and Contraction of Powder River Between Moorhead and Broadus, MT: Geomorphic Observations and Numerical Modeling, James E. Pizzuto, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p984-988.

Fluvial Hydraulics of Streams and Mountain Rivers with Mobile Bed, Wojciech Bartnik and Alicja Michalik, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p767-771.

Free-Surface Instability in Flow down Steep Rivers, Cheng-lung Chen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1264.

A Mechanism of Pool Formation and Maintenance in Forest Streams, Richard D. Smith and Robert L. Beschta, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p824-828.

Stability Principle of Critical Flow Depth in a Moving Co-ordinate System, Cheng-lung Chen, (Hydraulic Engi-neering '94, George V. Cotroneo, ed. and Ralph R. Ru-mer, ed., 1994), p1263.

Theoretical study of unstable waves in the rapids of the river, H. Kyotoh, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1265-1269.

Fly ash

Advanced Coal Conversion Solid Wastes: Waste-Management Implications, Charles J. Moretti, EY Apr. 94, pl-16.

Coal Ash and Dredged Material in Reef Construction, William B. Baker, Jr. and Richard F. Gorini, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p664-672

Effect of Fly Ash and Silica Fume on Alkali Silica Reactions, Mette Geiker and Niels Thaulow, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p123-136.

Fly Ash and Alkali-Aggregate Reaction, Michael Thomas, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p362-376.

High-Performance Concrete Incorporating Large Volumes of ASTM Class F Fly Ash, A. Bilodeau and V. M. Malhotra, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p508-523.

Hydration Mineralogy of Cementitious Coal Combustion By-Products, Gregory J. McCarthy and J. K. Solem-Tishmack, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p103-121.

Long-Term Strength Development of Pavement Concretes, David A. Lange, MT Feb. 94, p78-87.

Microstructural Development in High-Volume Fly-Ash Cement System, Aimin Xu and Shondeep L. Sarkar, MT Feb. 94, p117-136.

Microstructure, Image Analysis, and Fly Ash in Hardened Cement Paste, Sidney Diamond, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p337.

Mineral Admixtures for Concrete - An Overview of Recent Developments, P. K. Mehta, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p243-256.

Mineral Admixtures: Reactions, Micro-Structure and Macro-Properties, Jan Bijen and Hans Pietersen, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p292-328.

Permeability Behavior of a Water Treatment Sludge, M. C.

Wang and W. Tseng, GT Oct. 93, p1672-1677.

Properties of High Fly Ash Content Cellular Concrete,
Ronald D. Neufeld, Luis E. Vallejo, Wenyi Hu, Martin Latona, Christopher Carson and Christopher Kelly, EY

Apr. 94, p35-48.
Recycled Material, William A. Mallow, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham,

new materiats and memoas of Repair, Kim D. Basnam, ed., 1994), p828-835. Strategy for Beneficial Use of Stoker-Boiler Coal Ash, Christina B. Behr-Andres, Gordon K. Parish and Neil J.

Hutzler, EE Mar/Apr. 94, p401-415.

Treatment of Metal Industrial Wastewater by Fly Ash and Cement Fixation, C. H. Weng and C. P. Huang, EE Nov./Dec. 94, p1470-1487.

Anisotropic Plasticity Model for Foams and Honeycombs, H. L. Schreyer, Q. H. Zuo and A. K. Maji, EM Sept. 94, p1913-1930.

Folded plates

Simple Semi-Loof Element for Analyzing Folded-Plate Structures, K. Y. Sze, EM Jan. 94, p120-134.

Food supply

Is It Possible to Colonize Mars? Jonathan Hurley and Steve Garcia, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p782-786.

Foot bridges

The World's Longest Cable-stayed Foot-Bridge Using Fiber Reinforced Plastics, Magdi A. Khalifa and Maher K. Tadros, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p207-214.

53 WAK Tests on Spread Footings, James C. Maxwell and Jean-Louis Briaud, (Vertical and Horizontal Deforma-tions of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p143-152.

Addendums to the Prediction Package, Robert Gibbens, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M.

Gibbens, ed., 1994), p86-91.
Bearing Capacity of Rectangular Footings on Geogrid-Reinforced Sand, Temel Yetimoglu, Jonathan T. H. Wu and Ahmet Saglamer, GT Dec. 94, p2083-2099

Class A Prediction of Shallow Footing Settlements, Harry G. Poulos, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p133-136.

A Computational Algorithm for Analysis of Rectangular Footings Under Partial Contact with Soil, P. Rajendran, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p652-659.

CPT-Based Prediction of Footing Response, Paul W. Mayne, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p214-218.

Data and Prediction Request for the Spread Footing Predic-tion Event, Robert Gibbens and Jean-Louis Briaud, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p11-85

Estimation of Settlements of Shallow Foundations, M. Surendra, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p153-156.

Explicit Stresses under Rectangular Footings, R. Irles and F. Irles, GT Feb. 94, p444-450. Footing Load Tests on Sand, Kenneth Tand, Erik Funegard and Pickett Warden, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T.

Yeung, ed. and Guy Y. Félio, ed., 1994), p164-178 Footing Modulus Near Slopes, Mark C. Gemperline, (Ver-tical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1058-1070.

Influence of Spatially Random Soil Stiffness on Foundation Settlements, Geoffrey M. Paice, D. V. Griffiths and Gordon A. Fenton, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p628-639.

Introduction, Albert F. DiMillio, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p4-10.

Load - Settlement Predictions for Spread Footing Event, Vincent Silvestri, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p141-144.

Load Settlement curve Method for Spread Footings of Sand, Jean-Louis Briaud and Philippe Jeanjean, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1774-1804.

Load-Settlement Characteristics of Spread Footings, V. A. Diyaljee, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p249-252.

Load-Settlement Prediction of Footings on Steep Slopes, Pedro Arduino, Emir J. Macari and Mark Gemperline, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1385-1399.

Long Term Performance of Raft and Footing Foundations Above Clayey Silt, A. O. Landva, A. J. Valsangkar and Z. Wroblewicz, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p860-874.

Predicted Load-Settlement Behavior of Spread Footings on Sand, Casan L. Sampaco, Loren R. Anderson, Joseph A. Caliendo, Abdel Agallouch, Hogan Chang, Chia-Ching Lin, Elhassan Elhassan, Kyle Gorder, Roger Greaves, Makarand S. Jakate, Won C. Kim, Arthur L. Moss and Darrin Sjoblom, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p232-235.

Predicting the Load-Displacement Behaviour of Spread Footings on Sand, Guido Gottardi and Paolo Simonini, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p236-239.

Predicting the Settlement of the Texas A&M Spread Footings on Sand, G. Wiseman and J. G. Zeitlen, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p129-132.

Prediction of Settlement of Spread Footings, Luciano Décourt, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p210-213.

Prediction of Settlements of Footings on Sands: Accuracy and Reliability, Riccardo Berardi and Renato Lancellotta, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p640-651.

Prediction of Shallow Foundation Settlement on Sand, Mazen E. Adib and Ramin Golesorkhi, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p228-231.

Predictions of Footing Tests Sponsored by the FHWA Using a Strain Hardening Elastoplastic Constitutive Model, 1. Shahrour and M. Zaher, *Credicted and Measured Behavior of Five Spread Footings on Sand*, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p224-227.

Reduction of Settlements Using Soil Reinforcement, M. Sherif Abdel-Baki and G. P. Raymond, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p525-537.

Seismic Settlement of Shallow Footings on Sands, Awad Al-Karni and Muniram Budhu, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p748-759. Settlement and Deformation Response of a Bridge Footing on a Sloped Fill, Guy Y. Félio and Gunther E. Bauer, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1071-1081.

Settlement of Footings on Granular Materials: Low and Large Strain Parameters, F. Ahtchi-Ali and J. C. Santamarina, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1287-1297.

Settlement of Shallow Foundations on Sand, Harvey E. Wahls and Mukesh Gupta, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p190-206.

Settlement of Spread Footings on Granular Soil, Chandra S. Brahma, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p160-163.

Settlement of Test Footings: Predictions from the University of New Mexico, Koon Meng Chua, Ling Xu, Eric Pease and Sameer Tamare, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p240-244.

Settlement Prediction of Spread Footing Based on Laboratory Test Results, Mohammed S. A. Siddiquee, Tadatsugu Tanaka and Fumio Tatsuoka, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), pl.37-140.

Soil-Structure Interaction During Mining Induced Ground Movements, Guoming Lin, Eric C. Drumm, Richard M. Bennett, Larry Powell and Ted Triplett, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p786-797.

Spread Footing Settlement Prediction for the National Geotechnical Experimentation Site Prediction Event: Settlement '94, P. Cooksey, Q. Tang, M. Zhao, M. Mauldon and E. Drumm, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p173-176.

Stress and Settlement of Footings in Sand, Bengt H. Fellenius and Ameir Altaee, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1760-1773.

Test and Prediction Results for Five Large Spread Footings on Sand, Jean-Louis Briaud and Robert Gibbens, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p92-128.

Test and Prediction Results for Five Spread Footings on Sand, Jean-Louis Briaud and Robert M. Gibbens, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1897-1898.

Towards a Rational Method of Predicting Settlements of Spread Footings on Sand, Martin Fahey, Peter K. Robertson and Ahmed A. Soliman, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p598-611.

WAK and Full-Scale Load Tests on Granular Fill, Kevin G. Sutterer, Karl W. Myers and Glenn J. Rix, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p153-163.

Force

A Conceptual Study of A Solar Power Satellite Using Centrifugal Force, Hiroshi Yamakawa, Hiroshi Kanamori, Kenji Nozaki, Takeo Oura, Takanori Sato, Hisahito Tadokoro, Kenji Takagi, Hiroshi Ueno, Koji Oishi, Haruyuki Namba and Shinji Matsumoto, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p57-63.

Construction Robot Force Control in Cleaning Operations, Y. Zhou and M. J. Skibniewski, AS Jan. 94, p33-49.

Effects of Force Reflection on Telerobotic Performance. Raymond Dick, Terry Faddis and Bill Barr, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p259-268.

Forces on Vibrating Cylinder Near Wall in Current and Waves, B. M. Sumer, J. Fredsøe, B. L. Jensen and N. Christiansen, WW May/June 94, p233-250.

Geosynthetic Loads in Landfills Slopes: Displacement Compatibility, J. H. Long, R. B. Gilbert and J. J. Daly, GT Nov. 94, p2009-2025.

Measurements of the Hydrodynamic Lift and Drag Forces Acting on Riprap Side Slope, A. F. Ahmed and F. S. El-Gamal, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p331-340.

Monitoring Stay Cable Forces During Construction of the Natchez Trace Parkway Arch Bridge, Allan Brayley, Brett Commander and Jeff Schulz, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p278-283.

The Nature of Structural Morphology and Some Interdisci-plinary Examples, Ture Wester, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1000-1009.

Simplified Calculation Method for Force Transfer in Com posite Columns, Jan A. Wium and Jean-Paul Lebet, ST Mar. 94, p728-746.

Forced vibration

Steady-State Oscillation of Hysteretic Differential Model. I: Response Analysis, C. W. Wong, Y. Q. Ni and S. L. Lau, EM Nov. 94, p2271-2298.

Adaptive Forecasting of Hourly Municipal Water Con-sumption, Chatree Homwongs, Tep Sastri and Joseph W. Foster, III, WR Nov/Dec. 94, p888-905.

ASA.WAVES: An Interactive PC-based Wave Forecasting Tool, Stéphan T. Grilli, T. Opishinski, M. L. Spaulding and T. Isaji, (Ocean Wave Measurement and Analysis. Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p890-904.

Combination of an Automated Channel Network Extracting System and a Distributed Watershed Model in Estimation Rainfall-Runoff Processes, Ray-Shyan Wu, Yi-'94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p356-360.

Considering Uncertainties in Water Resource Designs, Yeou-Koung Tung, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p457-460.

Construction Competition and Competitive Strategies, Janet K. Yates, ME Jan./Feb. 94, p58-69.

Cost-Schedule Integration for Cash-Flow Forecasting, Ronie Navon, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1536-1539.

Current and Future Research in Steel Bridge Structures, Karl H. Frank, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1077-1081.

Daily Procedure for GLFS Nowcasts, Chieh-Cheng J. Yen, John G. W. Kelley and Keith W. Bedford, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p202-206.

Development of the Tampa Bay Tidal Current Atlas, Kurt W. Hess, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p489-499

Digger's Decline: A Fable for Civil Engineers, John A. Alexander, El July 93, p304-308.

Effect of Data Sampling Time Resolution on Probability Distribution of Elapsed Time Between Rainfalls, James W. Ellerbroek, Ben Chie Yen and Robert Riggins, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p336-340.

Forecasting Labor Productivity Using Factor Model, H. Randolph Thomas and Ahmet S. Sakarcan, CO Mar. 94, p228-239.

Fort Bend County Surface Water Supply Study, Martha F. Juch and David E. Winslow, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p214-217.

GLFSVIEW - GLFS Product Viewing Application, Yi-Fei P. Chu, Chieh-Cheng J. Yen and Keith W. Bedford, (Hy-draulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p207-211.

The Great Lakes Forecasting System: An Overview, Keith W. Bedford and David J. Schwab, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p197-201.

Impact of GOES Data on Surface Heat Flux Predictions, Yi-Fei P. Chu, Keith W. Bedford, Carolyn J. Merry and Jay S. Hobgood, (Hydraulic Engineering '94, George V Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p212-

Improving Reservoir System Operations Under Water Rights Requirements, L. E. Brazil, W. Liu, G. N. Day, D. P. Laurine and R. Steger, (Water Policy and Manage-ment: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p588-591.

Instrumented Buoy Network Response to Ocean Swell, Theodore Mettlach and David Gilhousen, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p28-44.

Lessons Learned From Missed Predictions, John A. Focht, Jr., GT Oct. 94, p1651-1683

Long Term Predictability of River Stages under ENSO Influence, Juan B. Valdés, Dara Entekhabi and Paolo Bartolini, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p366-

Lumped Mass Modelling for the Dynamic Analysis of Aircraft Structures, Elias G. Abu-Saba, Ji-Yao Shen and William M. McGinley, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p124-134.

Prediction of Gravel Bedload with SAM, David R. Dawdy and Wen C. Wang, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p420-424.

Probabilistic Characterization of Droughts, G. V. Lo-ganathan, S. Mostaghimi, V. K. Lohani and M. K. Tchaou, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p197-200.

Quantification of Cost Uncertainties Using Neural Network Technique, Awad S. Hanna and Li-Chung Chao, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p41-46.

Salt River Project Strategic Water Resource Plan, Harold W. Thomas and Mark A. Emelity, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p234-237.

A Satellite Based River Forecast System for the Nile River, Victor Koren and Curtis B. Barrett, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p9-12.

Sensitivity of Great Lakes Forecasting System Nowcasts to Meteorological Fields and Model Parameters, William P. O'Connor and David J. Schwab, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p149-157.

Short-Term Forecasts for Lake Erie, John G. W. Kelley, Chieh-Cheng J. Yen, Jay S. Hobgood, David J. Schwab and Keith W. Bedford, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p227-231.

Space Stations Past, Present, and Future, Keegan Kim-brough, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p837-841.

Spectral and Parametric Wave Models of Lake Erie, David J. Welsh and Keith W. Bedford, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p217-221.

Uncertainties in Flow Modeling and Forecasting for Niagara River, Randy D. Crissman, Chao-Lin Chiu, Weizu Yu, Kazumasa Mizumura and Ion Corbu, HY Nov. 93, p1231-1250.

Foreign countries

International Expansion, Ethics, and Prohibited Foreign Trade Practices, A. L. Barco, ME Sept./Oct. 94, p34-40. Marketing Professional Services in Asia, Shawn R. T. Severn and K. V. Lew, ME Sept./Oct. 94, p24-26.

The Road to New Construction Markets, CE Sept. 94, p8.

Construction Competition and Competitive Strategies, Janet K. Yates, ME Jan./Feb. 94, p58-69.

Foreign projects

Building the Urban Environment, Candace Port-Hull, WP Spring 94, p41-42.

International Expansion, Ethics, and Prohibited Foreign Trade Practices, A. L. Barco, ME Sept./Oct. 94, p34-40. The Road to New Construction Markets, CE Sept. 94, p8. Vietnam: Firsthand Feedback, Virginia Fairweather, WP Spring 94, p9-12.

Vietnam: Taming the Tiger, Irwin Jay Robinson, WP Spring 94, p6-8.

Foreign trade

International Expansion, Ethics, and Prohibited Foreign Trade Practices, A. L. Barco, ME Sept./Oct. 94, p34-40. The Mexican Migration, Virginia Fairweather, WP Spring

94, p13-18.

Rebuilding the Former Soviet States: Perspectives on the Construction Market, V. L. Khazanet, WP Spring 94, p32-36.

Forensic engineering

Methodology for Forensic Investigations of Seismic Damage, Duane Castaneda and Colin Brown, ST Dec. 94, p3506-3524.

Forestry

Agroforestry Drainage Management Model: I: Theory and Validation, F. F. Karajeh, K. K. Tanji and I. P. King, IR Mar./Apr. 94, p363-381.

Forests

A Mechanism of Pool Formation and Maintenance in Forest Streams, Richard D. Smith and Robert L. Beschta, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p824-828.

Research and Development — Why bother? Robert J. Tichy, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p683-688.

Formwork, construction

Analysis of Concrete Construction Live Loads on Newly Poured Slabs, Saeed Karshenas and Haitham Ayoub, ST May 94, p1525-1542

Dynamic Modeling of Slab Formwork during Concrete Placement, Saeed Karshenas and Stephen M. Heinrich,

ST July 94, p2199-2217.

Strength Variability of Wood Formwork Members, Saeed Karshenas, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p526-531.

Fossil fuels

The Hidden Cost of Clean Air Regulations, Bernard H. Hertlein and Matthew R. Johnson, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed.,

1994), p1119-1126.

Roles of the Lunar-Solar Power System In Development of the Resources of Greater Earth for Mankind, David R. Criswell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p638-647.

Utilization of Fossile Fuels Combustion Waste, Ivan Odler, (Cement Manufacture and Use, Paul W. Brown, ed.,

1994), p57-73.

Colloidal Fouling of Reverse Osmosis Membranes, Menachem Elimelech and Xiaohua Zhu, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p329-335.

Fouling of Nanofiltration Membranes by Natural Organic Matter, Francis A. DiGiano, Anne Braghetta, James Nilson and Bruce Utne, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p320-328.

Foundation design

California Housing Damage Related to Expansive Soils, Richard L. Meehan and Lawrence B. Karp, CF May 94, p139-157.

Computer Applications in Structural Analysis and Design, J. A. Bohinsky and J. P. Lee, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p462-465.

Coupling Translation and Rocking Motions, J. P. Lee and J. A. Bohinsky, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p61-66.

Design of Mat Foundation for Egg Shape Digesters, S. S. Ibrahim and M. R. Graves, (Structures Congress XII, N.

C. Baker, ed. and Barry J. Loodno, ed., 1994), p13-18. Down Drag on Friction Piles: A Case History, Yalcin B. Acar, R. Richard Avent and Mohd R. Taha, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p986-999.

Introduction, Albert F. DiMillio, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p4-10.

Performance of Slab-on-Grade Foundations on Expansive Soil, Robert W. Day, CF May 94, p129-138.

Prediction of Settlements of Footings on Sands: Accuracy and Reliability, Riccardo Berardi and Renato Lancellotta, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p640-651.

Foundation performance

Design and Performance of a Piled Raft Foundation, Mark Randolph and Patrick Clancy, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p314-324.

Performance of Three Large-Diameter Oil Tanks on Soft Clay, Mamdouh Hamza, John R. Davie and Michael R. Lewis, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p923-936.

Vertical Displacement Induced in Soil by Conical Shell Foundations, Mohamed Abdel-Rahman and Adel Hanna, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y.

Félio, ed., 1994), p937-948.

Foundation settlement

Analysis of Foundation Settlement Due to Earthquake, Jian Zhou and Jian Du, (Vertical and Horizontal Deforma tions of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p798-805.

Behavior of Foundations Subjected to Large Ground Movements, Richard M. Bennett, Eric C. Drumm and Guoming Lin, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p49-54.

Computerized Building Settlement Analyses for a Contaminated Groundwater Remediation Project, James A. McKelvey, III, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1228-1235

Deformation of Sand Foundations Induced by Earthquakes, Xiangwu Zeng, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p726-739.

Eccentric Settlements of a Rigid Foundation on a Consoli-dating Layer, Zhongqi Yue and A. P. S. Selvadurai, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p612-627.

Experimental Study of the Settlement of Shallow Foundations, Samuel Amar, François Baguelin, Yves Canépa and Roger Frank, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1602-1610.

Geocell Mattress Effects on Embankment Settlements, Mark D. Evans, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p584-597.

Influence of Spatially Random Soil Stiffness on Foundation Settlements, Geoffrey M. Paice, D. V. Griffiths and Gordon A. Fenton, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p628-639.

Messeturm Tower: Frankfurt, Germany, Irwin G. Cantor and Ahmad Rahimian, (Structures Congress XII, N. C Baker, ed. and Barry J. Loodno, ed., 1994), p1550-1555.

Movement of Foundations on Rock, Ian W. Johnston, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1703-1717.

Numerical Modeling of Bridge Approach Settlement with Foundation-Embankment Interaction, Musharraf Zaman, Dinesh Bhat and Joakim Laguros, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1400-1414.

Performance of Oil Storage Tanks on Vibroflotation Improved Hydraulic Fill in the Port of Tampa, Florida, Fintan J. Buggy, Ramon E. Martinez, James D. Hussin and Richard J. Deschamps, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p548-560.

Settlement of Building Foundations on Clay Soil Caused by Evapotranspiration, Vincent Silvestri and Claudette Tabib, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1494-1504.

Settlement Predictions at a Florida Port Facility, Thomas E. Selfridge and Kirk A. McIntosh, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p571-583

Settlement Predictions Using Piezocone, J. R. Davie, H. Senapathy and W. Murphy, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p818-829.

Software for Settlement Analysis, John T. Christian, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1718-1729.

Soil-Structure Interaction During Mining Induced Ground Movements, Guoming Lin, Eric C. Drumm, Richard M. Bennett, Larry Powell and Ted Triplett, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p786-797.

Strip Foundation on Geogrid-Reinforced Clay, E. C. Shin, B. M. Das, V. K. Puri and S. C. Yen, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p538-547.

The Structural History of the Jacob Bachmann Tavern, Jack R. Kayser and Kristina Lammi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1570.

Tolerable Deformations, Harvey E. Wahls, (Vertical and Horizontal Deformations of Foundations and Embank-ments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1611-1628.

Tree Root Induced Settlement of a Large Industrial Building Founded on Expansive Clay-A Case History, Aziz Aboaziza and Hisham H. H. Mahmoud, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1472-1481.

Foundation stability analysis

Compaction Grouting Stops Settlement of an Operating Water Treatment Plant, Percy M. Wimberly, III, F. Barry Newman, Kenneth B. Andromalos and Chris R. Ryan, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1176-1192.

Performance of Fill that Contains Organic Matter, Robert W. Day, CF Nov. 94, p264-273.

Foundations

Control of Settlement and Uplift of Structures Using Short Aggregate Piers, Evert C. Lawton, Nathaniel S. Fox and Richard L. Handy, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p121-132.

Design of Socketed Drilled Shafts in Limestone, M. C. McVay, F. C. Townsend and R. C. Williams, GT Oct.

92, p1626-1637.

Developing Retrofit Strategies for the China Basin Viaduct Foundations Using Non-linear, Hysteretic Analysis, D. R. Parker, John C. Castro and R. A. Dameron, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1839-1845.

Dynamic Properties of Gravel Layers Investigated by In-Situ Freezing Sampling, Takeji Kokusho and Yukihisa Tanaka, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p121-140

Dynamics of Nuclear Power Plant Structures with Foundation Interaction, Samir J. Serhan, (Structures Congress

XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), Effect of Boundary Conditions on Buckling of Friction Piles, Mohammed A. Gabr, Jibai Wang and Sam A.

Kiger, EM June 94, p1392-1400.

Effect of Flexibility on Impedance Functions for Circular Foundation, Gin-Show Liou and Pao-Han Huang, EM July 94, p1429-1446.

Foundation Deformation Due to Earthquakes, Ricardo Dobry, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1846-1863.

Foundation Slab for Lunar Base Construction, Mikiya Okumura, Yasuhiro Ohashi, Takao Ueno, Shojiro Motoyui and Kiosuke Murakawa, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1128-1137.

Foundation Uniform Pressure and Soil-Structure Interaction, Rusk Masih, GT Nov. 94, p2064-2071.

How Tall Transmission Poles Survived Hurricane Andrew, Kou-Roung Chang, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p377-386.

Lurricane Andrew Induced Damage to Florida Power & Light's Transmission System, C. Jerry Wong, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p387-396.

The Influence of Fines Type and Content on Cyclic Strength, Joseph Patrick Koester, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p17-33.

Interpretation of Nondestructive Integrity Tests Using Artificial Neural Networks, Glenn J. Rix, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1346-1351.

Jet Grouting Gains, Paul Tarricone, CE Dec. 94, p40-43. The Manufactured Home Dilemma, James R. McDonald, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p195-202.

Minipile Construction Keeps the Plant Running, CE May 94, p17.

Overview - Electrical Substation Structures Design Guide, Leon Kempner, Jr., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p597-600.

SDC Detector Foundation Requirements for the SSC, J. L. Western, M. W. Butalla, H. James Krebs and Gary W. Tulk, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p767-772.

Site Effects on Strong Shaking and Seismic Risk: Recent Developments and Their Impact on Seismic Design Codes and Practice, Raymond B. Seed, Stephen E. Dickenson and Chin Man Mok, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p573-

Torching Soils Increases Strength and Stiffness, CE Apr. 94, p25.

Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994, 0-7844-0027-X, 1940pp. Fourier analysis

The Continental Shelf: A Source for Naturally-Delivered Beach Sand, Robert H. Osborne, Kelly A. Áhlschwede, Sean D. Broadhead, Kyung Cho, Joshua R. Feffer, Ar-Stati D. Broadland, Ayung Cho, Joshua R. Fetter, Mur C. Lee, Jinyou Liu, Craig Magnusen, Janette M. Murrillo de Nava, Rory A. Robinson, Chia-Chen Yeh and Yi Lu, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p335-349.

Fourier series

Comparisons of Directional Wave Analysis Methods, Taer-Comparisons of Directional Wave Analysis Methods, 1acrim Kim, Lihwa Lin and Hsiang Wang, (Ocean Wave
Measurement and Analysis, Orville T. Magoon, ed. and
J. Michael Hemsley, ed., 1994), p554-568.
Evolutionary Fourier Analysis of Wave Data, Leon E.
Borgman, Mihail Petrakos and Chao Li, (Ocean Wave
Members and Analysis Orvilla T. Magoon, ed. and

Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p708-725.

Stress and Displacement of Thick Doubly Curved Laminat-

ed Shells, Chih-Ping Wu and Chi-Chuan Liu, EM July

94. p1403-1428.

Fourier transform

Dynamic Response of Fibre-Reinforced Composite Plates Under Distributed Impact Loads, R. K. Mittal and M. R. Khalili, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p94-109.

Plane Orthotropic Layer by Transfer Matrix-Spline Boundary Element, L. Z. Jiang and J. S. Lee, EM May 94, p1026-1041.

Fracture mechanics

Analytical and Experimental Analyses of Fatigue Crack Propagation in Asphalt Concrete Overlays, R. Ballarini, G. C. Ferrante and J. L. Figueroa, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p978-983.

Application of Fracture Mechanics to Soils: An Overview, Luis E. Vallejo, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert

Y. Liang, ed., 1994), p1-20.

Application of NLFM Models to Predict Cracking in Concrete Gravity Dams, Sudip S. Bhattacharjee and Pierre Léger, ST Apr. 94, p1255-1271.

Characterizing Fracture Behavior of Fiber-Reinforced Composites, Surendra P. Shah, Yixin Shao and Zongjin Li, (Advances in Cement and Concrete, Michael Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p186-199.

Control of Random Crack Formation in Portland Cement Concrete Pavements, Yeou-Shang Jenq and Sang-Chel Kim, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p972-977.

Crack Depths in Drying Clays Using Fracture Mechanics, Peter H. Morris, James Graham and David J. Williams, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p40-53.

Cracking and Fracture Behavior of Soil, Hsai-Yang Fang, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed.,

1994), p102-117.

Effects of Process Zones on Crack Interactions, K. R. Shah, J. F. Labuz and H. K. Stolarski, EM Dec. 94, p2678-

Fatigue Cracking and Rutting in Flexible Pavements, D. V. Ramsamooj, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p132-146.

Fatigue-Reliability Evaluation of Steel Bridges, Zhengwei Zhao, Achintya Haldar and Florence L. Breen, Jr., ST

May 94, p1608-1623.

Fractals, Fractures, and Size Effects in Concrete, Victor E. Saouma and Christopher C. Barton, EM Apr. 94, p835-Fracture Analysis of Bolted Timber Connections,

Smith and Lin J. Hu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p912-917. Fracture Behavior of Cement Grouted Sand, C. Vipulanandan, A. Ata and S. Mebarkia, (Fracture Mechanics Ap plied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p147-159.

Fracture Mechanics Analysis of Welded Joints Using Boundary/Finite Element Alternating Methods, Ruijia Mu and D. V. Reddy, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1920-1927.

Fracture Mechanics and Plasticity in Saturated Clay, Adel S. Saada, Liqun Liang and Gary F. Bianchini, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p21-39.

Fracture Mechanics and Size Effect of Concrete in Tension, Tianxi Tang, Surendra P. Shah and Chengsheng Ouyang, ST Nov. 92, p3169-3185.

Fracture Mechanics Applied to Geotechnical Engineering, Geotechnical Special Publication No. 43, Luis E. Valle-jo, ed. and Robert Y. Liang, ed., 1994, 0-7844-0056-3, 165pp

Fracture Toughness of Compacted Cohesive Soils Using Ring Test, Jack A. Harison, Bobby O. Hardin and

Kamyar Mahboub, GT May 94, p872-891.

The Mechanics of Cracking in Embankment Dams, James R. Talbot, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p118-131.

Modeling Fracture in Cemented Granular Materials, B. C. Trent and L. G. Margolin, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p54-69.

Modeling of Fiber Pullout in Cement Based Composites Using an R-Curve Approach, B. Mobasher and C. Y. Li, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p559-566.

Numerical Modeling of Tensile Crack Propagation in Concrete Dams, Ram Kumar and G. C. Nayak, ST Apr. 94,

p1053-1074.

Peak Load Determination in Linear Fictitious Crack Model, Yuan N. Li and Robert Y. Liang, EM Feb. 94, p232-249

Penetration Fracture of Ice Plate: 2D Analysis and Size Effect, Yuan-Neng Li and Zdeněk P. Bažant, EM July 94, p1481-1498.

Penetration Fracture of Sea Ice Plate: Simplified Analysis and Size Effect, Zdeněk P. Bažant and Yuan-Neng Li, EM June 94, p1304-1321.

Pullout of Inclined Fibers from Cementitious Matrix, C. Ouyang, A. Pacios and S. P. Shah, EM Dec. 94, p2641-

Scaling Laws in Mechanics of Failure, Zdeněk P. Bažant, EM Sept. 93, p1828-1844.

Self-Balancing Laminate, Jozsef Bodig, Robert T. Brooks and Allan G. Burk, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p689-694

Stability Theory of Cohesive Crack Model, Yuan N. Li and Robert Y. Liang, EM Mar. 92, p587-603.

Two New Methods of Fictitious-Crack Model and Their Applications, Yuan N. Li, Michael Müller and J.-D. Wörner, EM Dec. 94, p2604-2620.

Understanding Discrete Fracture Growth in Rock by Interpreting Acoustic Emissions, Steven D. Glaser, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p70-85.

Uplift Modeling for Fracture Mechanics Analysis of Concrete Dams, Raymond R. Dewey, Ronald W. Reich and Victor E. Saouma, ST Oct. 94, p3025-3044.

Fracture strength

Fracture Toughness of Compacted Cohesive Soils Using Ring Test, Jack A. Harison, Bobby O. Hardin and Kamyar Mahboub, GT May 94, p872-891.

Fractures

Analysis of Flow Along Anisotropic Fractures in Partially Saturated Media, J. S. Y. Wang and B. L. Cox, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1915-1921.

AWS versus AIJ Tubular K-Connection Design Rules, Yoshiaki Kurobane and Kenshi Ochi, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p190-199.

Borehole Fluid Dynamic Temperature Logging to Evaluate Fracture Hydraulic Properties, C.-F. Tsang, F. V. Hale, P. Bluemling and S. Vomvoris, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2655-2659. Characterization Study of Fractured Rock, Kenzi

Karasaki, Barry Freifeld and Cliff Davison, (High Level Radioactive Waste Management, High Level Radioac-

tive Waste Program Committee, 1994), p2423-2428.

Omparison of Coupled Thermal-Mechanical-Coupled Comparison Hydrological Analysis of a Fractured Rock Mass, M. P. Ahola, A. H. Chowdhury, S. M. Hsiung and J. Philip, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2492-2499

Effect of Fractures on Repository Dryout, Roger R. Eaton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p2442-2449.

Effective Unsaturated Hydraulic Property Determination with the Renormalization Group Approach: Methodology, Sitakanta Mohanty and Amvrossios C. Bagtzoglou, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p2660-2668.

Fracture-Matrix Interaction in Topopah Spring Tuff: Experiment and Numerical Analysis, Robert J. Glass, Vince C. Tidwell. Alan L. Flint. William Peplinski and Yvette Tidwell, Alan L. Flint, William Peplinski and Yvette Castro, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1905-1914.

Geostatistics for Fracture Characterization, R. Mohan Srivastava and Bruce M. Davis, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p2131-2138.

How Should the Migration and Retardation of Colloids be Characterized? Peter Grindrod, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2709-2718.

Hydrostatic Pressure Loading due to Ice Formation in Manholes, S. Tanary, A. Fahim and M. Munro, CR Dec.

94, p121-132.

Impulse Effect on Redundancy of a Tied-Arch Bridge, Leon L-Y. Lai, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p712-719.

Inferences of Paleoenvironment From Petrographic, Chemical and Stable-Isotope Studies of Calcretes and Fracture Calcites, David T. Vaniman and Joseph F. Whelan, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2730-2737.

Interface Model Applied to Fracture of Masonry Struc-tures, Hamid R. Lotfi and P. Benson Shing, ST Jan. 94,

p63-80.

Isotope Systematics in Ground Water and Hydrogenic De-posits at ASPO, Sweden, Bill Wallin and Zell E. Peterman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2692-2701.

Late Glacial to Modern Climate Near Yucca Mountain Nevada, Richard M. Forester, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p2750-2754. Liquid Infiltration Through the Boiling-Point Isotherm in a duction influence in the policy of the state of the policy p2189-2196.

Localization Analysis of Nonlocal Model Based on Crack Interactions, Milan Jirásek and Zdeněk P. Bažant, EM

July 94, p1521-1542.

Mapping Fractures Using Fresnel Volume Tomography, D. W. Vasco, John E. Peterson, Jr. and E. L. Majer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2648-2654.

Migration of Conservative and Poorly Sorbing Tracers in Granite Fractures, Tjalle T. Vandergraaf, Chung-Kyun Park and Douglas J. Drew, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2251-2256. Modeling Infiltration Into a Tuff Matrix From a Saturated Vertical Fracture, Clifford K. Ho, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1897-1904.

Observations of Water Movement in a Block of Fractured Welded Tuff, Falah Thamir, Edward M. Kwicklis, David Hampson and Steve Anderton, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p2020-2029.

Phenomenological Studies of Two-Phase Flow Processes for Nuclear Waste Isolation, Karsten Pruess, Stefan Finsterle, Peter Persoff and Curt Oldenburg, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2639-2647.

The Role of Fracture Coatings on Water Imbibition Into Unsaturated Tuff, Vijay S. Chekuri, Scott W. Tyler and John W. Fordham, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1891-1896. Rotating Crack Model and Fracture in a R/C Medium,

Azadeh Parvin and Theodore G. Toridis, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1944-1950.

A Study of Two Phase Flow in Fracture Networks, Kenzi Karasaki, Stuart Segan, Karsten Pruess and Stratis Vom-voris, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2633-2638.

Ultrasonic Rock Fracture Characterization, G. Danko, G. Zhan, Cs. Mezei, J. Daemen and P. Mousset-Jones, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p2789-2796.

An Updated Fracture-Flow Model for Total-System Performance Assessment of Yucca Mountain, John H. Gauthier, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1663-1670.

Wetting Phase Permeability in a Partially Saturated Horizontal Fracture, M. J. Nicholl and R. J. Glass, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2007-

Fracturing Computer Modelling of Comminuting Granular Media, H. Alehossein and H.-B. Mühlhaus, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p660-667. Fracture Size Effect: Review of Evidence for Concrete

Structures, Zdeněk P. Bažant, Joško Ožbolt and Rolf Eligehausen, ST Aug. 94, p2377-2398.

The Behaviour and Design of Stressed-Arch (Strarch) Frames, Murray J. Clarke and Gregory J. Hancock, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994),

p.200-209.

Behaviour of Concrete Masonry Infill - Steel Frame Structures, J. L. Dawe and C. K. Seah, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p67-76.

Design of Half-Through or "Pony" Truss Bridges Using Square or Rectangular Hollow Structural Sections, Steven J. Herth, (Spatial, Lattice and Tension Structures), Lebu E. Abal ed. John W. Loronet ed. and China II. John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p210-220. Space-Frame Pyramid, Michael D. Griffin, Michael R. Pat-

terson and Tejav J. DeGanyar, CE Nov. 94, p68-70.

Analysis of Free Vibrations of Tall Buildings, Qiusheng Li, Hong Cao and Guiqing Li, EM Sept. 94, p1861-1876. Computer Analysis of Lateral Loading in Wood-Framed Structures, R. Williams, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1513-1515.

Dynamic Loading of a Rigid Frame Bridge, Dongzhou Huang, Ton-Lo Wang and Mohsen Shahawy, (Structures Congress XII, N. C. Baker, ed. and Barry J. Lood-

no, ed., 1994), p85-90.

Earthquake Barrier Technology: Sliding-Friction Energy
 Dissipation, Marc S. Caspe, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1018-

Lateral Stiffness of Frames and Effective Length of Framed Columns, Ruhi Aydın and Hasan Gönen, ST May 94, p1455-1470.

Negative Shear Lag in Framed-Tube Buildings, Y. Singh and A. K. Nagpal, ST Nov. 94, p3105-3121. Nonlinear Finite-Element Model for Light-Frame Stud

Walls, B. Kasal and R. J. Leichti, ST Nov. 92, p3122-3135. Nonlinear Finite-Element Model of Complete Light-Frame

Wood Structures, Bohumil Kasal, Robert J. Leichti and

Rafik Y. Itani, ST Jan. 94, p100-119.

Seismic Behavior of Non-Ductile Concrete Frame Structures, Yahya C. Kurama, Stephen P. Pessiki, Richard Sause and Shaojie Wu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1496-1501.

Simple Method for Approximate Analysis of Framed Tube Structures, A. K. H. Kwan, ST Apr. 94, p1221-1239. Towards Robust, Effective and Efficient Second Order

Analysis of Practical Steel Frames, S. L. Chan, Z. W. Zhou and W. F. Chen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1173-1178.

Wind Forces on Industrial Facilities, Joseph A. Bohinsky and Hikmat E. Zerbe, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1036-1041.

Algorithm for Hysteresis Analysis of Prestressed-Concrete Frames, Xiaozu Su and Bolong Zhu, ST June 94,

Application of Adaptive Analysis to Reinforced Concrete Frames, C. G. Karayannis, B. A. Izzuddin and A. S. El-nashai, ST Oct. 94, p2935-2957.

Behavior of Tall Frame Combining Rigid and Semi-Rigid Connections, Norimitsu Kishi, Wai-Fah Chen, Yoshiaki Goto and Ken-ichi G. Matsuoka, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1185-1190.

Classification of Semi-Rigid Connections Based on the Elastic-Plastic Mechanical Behavior of Frames, Yoshiaki Goto, Satoshi Miyashita and Wai-Fah Chen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1191-1196.

Concrete Buildings in Regions of High Seismicity, S. K. Ghosh, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p31-36.

Dynamic Stability of Imperfect Frames Under Joint Displacements, D. S. Sophianopoulos and A. N. Kounadis, EM Aug. 94, p1661-1674.

Dynamic Testing of Unreinforced Brick Masonry Infills, Ghassan Al-Chaar, Richard Angel and Daniel P. Abrams, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p791-796.

Element Identification of Member Properties of Framed Structures, Andres W. C. Oreta and Tada-aki Tanabe, ST

July 94, p1961-1976.

A Generic Inflatable Structure for a Lunar/Martian Base, Willy Z. Sadeh and Marvin E. Criswell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1146-

K-Factor for Columns in any Type of Construction: Non-paradoxical Approach, J. Dario Aristizabal-Ochoa, ST

Apr. 94, p1272-1290.

Nonlinear Collapse of Offshore Jacket Structures, Helen M. Bolt, Colin J. Billington and J. Keith Ward, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p19-24.

Pointwise Equilibrating Polynomial Element for Nonlinear Analysis of Frames, Siu Lai Chan and Zhi Hua Zhou, ST

June 94, p1703-1717.

Progress in Reinforced Concrete Column Design, R. Green, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p455-460.

Seismic Upgrades Using Energy Dissipation Devices, David Bleiman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1274-1279.

Slenderness K factor for Leaning Columns, J. Dario Aris-tizabal-Ochoa, ST Oct. 94, p2977-2991.

Stability of Columns under Uniform Axial Load with Semirigid Connections, J. Dario Aristizabal-Ochoa, ST Nov. 94, p3212-3222.

Framing

Space-Frame Pyramid, Michael D. Griffin, Michael R. Patterson and Tejav J. DeGanyar, CE Nov. 94, p68-70.

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The Channel Tunnel: Larger Than Life, and Late, Virginia Fairweather, CE May 94, p42-46.

Improvement and Re-establishment of Good Hydraulic Conditions in Sewers: The French Experience, Y. Diab and M. Mommessin, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p329-

Light at the End of the Chunnel, Virginia Fairweather, WP Special issue 94, p10-13.

Frazil ice

Hydro Plant Research Data Acquisition System, James E. Donegan, Julia Crittenden Tarbell and John F. Doyle, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p477-481.

3D Free Surface Flow Model Verification - A Panel Discussion on Test Cases, Sam S. Y. Wang, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p910-912.

Countercurrent Jet Device, Willi H. Hager, HY Apr. 94, p504-517.

Free surface flow modelling on a complex topography, Mohamed Naaim and Gerard Brugnot, (Modelling Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p298-308.

Identification of A Field Data Collection Program in Delaware Bay, B. H. Johnson, K. W. Kim, T. L. Fagerberg and H. A. Benson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

MAC3D: Multiblock Numerical Model for Hydraulic Applications, Robert S. Bernard, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p507-511.

The Numerical Simulation of Wetting and drying Areas using Riemann Solvers, G. W. Tchamen and R. Kahawita, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p127-140.

PSF-PM Verification of 3D Free Surface Flow Models, Sam S. Y. Wang and F. Mauricio Toro-Botero, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p895-899.

Use of FESWMS-2DH for the Attaway Road Bridge Repair Project, M. A. Ports, D. D. Dee, Jr. and J. Warren, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p579-583.

Verification of a Three-Dimensional Model of Delaware Bay, K. W. Kim, B. H. Johnson and J. Gebert, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p574-578.

Free surfaces

3D Free Surface Flow Model Verification - A Panel Dis-cussion on Test Cases, Sam S. Y. Wang, (Hydraulic En-gineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p910-912.

Free-Surface Instability in Flow down Steep Rivers, Cheng-lung Chen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

p1264.

Identification of A Field Data Collection Program in Delaware Bay, B. H. Johnson, K. W. Kim, T. L. Fagerberg and H. A. Benson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

Momentum and Energy Coefficients Based on Power-Law Velocity Profile, Cheng-lung Chen, HY Nov. 92,

p1571-1584

Nonlinearity and Free-Surface Flow, Nazeer Ahmed, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p327-331.

Raiph R. Ruinel, ed., 1994, p.527-531. PSF-PM Verification of 3D Free Surface Flow Models, Sam S. Y. Wang and F. Mauricio Toro-Botero, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p.895-899.

Seepage from Canal to Asymmetric Drainages, Abate T. Wolde-Kirkos and A. S. Chawla, IR Sept./Oct. 94, p949-956.

Stability Principle of Critical Flow Depth in a Moving Coordinate System, Cheng-lung Chen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1263.

Freeze-thaw cycle

Hydraulic Conductivity of Compacted Clay Frozen and Thawed in Situ, Craig H. Benson and Majdi A. Othman, GT Feb. 93, p276-294.

Mathematics of Concrete Scaling, Dan F. Adkins, Gary P. Merkley and Gertrudys Brito, MT May 93, p280-288.

Repair of Abrasion/Erosion Damage to Vallecito Dam with Silica Fume Concrete, Stan Mattingly and Glenn Smoak, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p735-742.

Freeze-thaw durability

Evaluation of Silane Sealer Application on Concrete, Doran L. Glauz and Vijay K. Jain, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p155-162.

Re-Repair of the Piedras Bridge in El Paso, Texas with a New Low Pressure Spray Applied Structural Repair Mortar System, Robert J. Gulyas and Robert Navarro, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p936-954.

Recent Developments in Physical Testing of Aggregates to Ensure Durable Concrete, C. A. Rogers and S. A. Senior, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), n338-361.

Wood Fiber Reinforced Cement Composites Under Wetting-Drying and Freezing-Thawing Cycles, Parviz Soroushian, Shashidhara Marikunte and Jong-Pil Won, MT Nov. 94, p595-611.

Freezing

Dynamic Properties of Gravel Layers Investigated by In-Situ Freezing Sampling, Takeji Kokusho and Yukihisa Tanaka, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p121-140.

Dynamic Properties of Gravels Sampled by Ground Freezing, Shigeru Goto, Shin'ya Nishio and Yoshiaki Yoshimi, Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p141-157.

Effect of Preagitation on Freeze-Thaw-Conditioned Sludge Dewaterability, P. Aarne Vesilind and Jiann-Long Chen, CR Dec. 94, p113-120.

Frost Susceptibility of Concrete in Near-Saturated States, B. V. Enüstün, K. S. Soo and K. L. Bergeson, MT May 94, p290-306.

Impact and Flexure Properties of Glass/Vinyl Ester Composites in Cold Regions, Vistasp M. Karbhari and Gregory Pope, CR Mar. 94, p1-20.

Frequencies

Development of a High Resolution Spectrometer for Measuring the Near-Earth RFI Environment: The First Auto-Correlator in Space, Namir E. Kassim, Kurt W. Weiler and Andrew W. Clegg, (Engineering, Construction, and Operations in Space 1V, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1410-1421.

Low Frequency Radio Astronomy from Earth or Lunar Orbit, Jack O. Burns, John P. Basart and Bernard M. McCune, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1400-1409.

Very Low Frequency Radio Astronomy from Lunar Orbit, Nebojsa Duric and Jack O. Burns, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1382-1389.

Frequency

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Applications of Large Domain Hydrodynamic Models to Generate Frequency-of-Occurrence Relationships, Norman W. Scheffner, Leon E. Borgman and David J. Mark, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p264-278.

Criteria for Acceptable Wind-Induced Motions, Nicholas Isyumov, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p642-647.

Evolutionary Fourier Analysis of Wave Data, Leon E. Borgman, Mihail Petrakos and Chao Li, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p708-725.

Frequency Domain Optimal Control Strategies for Aseismic Protection, B. F. Spencer, Jr., J. Suhardjo and M. K. Sain, EM Jan. 94, p135-158.

Importance of Speed and Frequency in Flexible Pavement Response, M. S. A. Hardy and D. Cebon, EM Mar. 94, p463-482.

Prestress Force Effect on Vibration Frequency of Concrete Bridges, M. Saiidi, B. Douglas and S. Feng, ST July 94, p2233-2241.

Probabilistic Evaluation of Human Perception Threshold of Horizontal Vibration of Buildings (0.125Hz to 6.0Hz), Jun Kanda, Yukio Tamura, Kunio Fujii, Tamio Ohtsuki, Kiyoto Shioya and Shinji Nakata, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p648-653.

Response Study of a Flexible Building Using Three Earthquake Records, M. Çelebi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1220-1225.

Space Station Microgravity Analysis and Assessment, John P. Wetzel, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p463-472.

A Study of Communication Signal Leakage Through the Earth's Ionosphere Using Ray-Tracing Techniques, M. McCoy and J. P. Basart, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p533-561.

The Use of Coda Waves for Characterizing the Site Effect on Strong Ground Motion, Keitit Aki and Byau-Heng Chin, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p579-584.

Vibration of Mindlin Plates on Point Supports Using Constraint Functions, K. M. Liew, Y. Xiang, S. Kitipornchai and M. K. Lim, EM Mar. 94, p499-513.

Frequency analysis

Comparison of Some Estimation Methods in Frequency Analysis, Zoubeida Kebaili-Bargaoui, HY Feb. 94, p228-235.

Frequency Analysis in Stochastic Linearization, F. Casciati, L. Faravelli and P. Venini, EM Dec. 94, p2498-2518.

Interdependence of Beach Fill Volumes and Repetition Intervals, Hans-H. Dette, Alfred Fuehrboeter and Arved J. Raudkivi, WW Nov./Dec. 94, p580-593.

Low-Flow Frequency Analysis with Censored Data, Chuck Kroll and Jery Stedinger, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p786-789.

Frequency distribution

Joint Probability Distribution of Rainfall Intensity and Duration, G. V. Loganathan and Glenda Patron, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p193-196.

Optimization of Space Lattice Structures with Multimodal Frequency Constraints, J. Czyz and S. Lukasiewicz, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p419-429.

Frequency response

A New Correction Procedure for Shipborne Wave Recorder Data, E. G. Pitt, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p726-739.

Steady-State Oscillation of Hysteretic Differential Model. I: Response Analysis, C. W. Wong, Y. Q. Ni and S. L. Lau, EM Nov. 94, p2271-2298.

EM NOV. 94, 22/11-2298.

Vibration Testing for Nondestructive Evaluation of Bridges. I: Theory, Mahmod M. Samman and Mrinmay Biswas, ST Jan. 94, p269-289.

Vibration Testing for Nondestructive Evaluation of Bridges. II: Results, Mahmod M. Samman and Mrinmay Biswas, ST Jan. 94, p290-306.

Fresh water

Circulation and Flushing in Casco Bay, Maine, Bin Gong and Bryan R. Pearce, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1039-1046.

Differential Dynamic Programming for Estuarine Manage-ment, Guihua Li and Larry W. Mays, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p653-656. Freshwater-Inflow Need of Estuary Computed by Texas

Estuarine MP Model, Junji Matsumoto, Gary Powell and David Brock, WR Sept./Oct. 94, p693-714.

Leachate Testing and Evaluation for Freshwater Sediments, James M. Brannon and Tommy E. Myers, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p737-746.

Modeling Circulation and Salinity Transport in the Indian River Lagoon, M. Z. Moustafa and J. M. Hamrick, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p381-395.

Multiobjective Models for Determining Freshwater Inflows to Bays and Estuaries, Ning Mao, Lise LeBlanc, James Siebert, Wenchin Shi and Larry W. Mays, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p649-652.

New Methodology for Optimization of Freshwater Inflows to Estuaries, Yixing Bao and Larry W. Mays, WR Mar./

Apr. 94, p199-217.

Optimization of Freshwater Inflows to Lavaca-Tres Palacios, Texas, Estuary, Yixing Bao and Larry W. Mays, WR Mar./Apr. 94, p218-236.

Public Perceptions of Fresh Water Issues, Robert E. O'Connor, Richard J. Bord and Ann Fisher, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p155-174.

Simulation of Flushing in Indian River Lagoon Using 1-D and 3-D Models, Y. P. Sheng, H. K. Lee and C. E. De-mas, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p366-380

Friction

CDR - A Chemical Solution to a Mechanical Problem, Gary E. Blizzard, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p172-181.

Earthquake Barrier Technology: Sliding-Friction Energy Dissipation, Marc S. Caspe, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1018-

Evaluating Flow Resistance Using Height of Roughness Protrusions, Ivana Marešová, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p712-716.

Headloss Analysis for Modern Piping Systems, L. Gregg Horn, (Hydraulics of Pipelines, Deon T. Fowles, ed. and

Douglas H. Wegener, ed., 1994), p10-27.

Integral Equation Model for Wave Propagation with Bottom Frictions, Philip L.-F. Liu and Yong-Sik Cho, WW Nov./Dec. 94, p594-608.

Laplace Valve Stroking for Complex Piping Systems, Don-ald Serpas, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p939-

Modeling Bottom Friction in Wind-Wave Models, Hendrik L. Tolman, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p769-783.

Motion of Contact-Load Particles at High Shear Stress, Fidelia N. Nnadi and Kenneth C. Wilson, HY Dec. 92, p1670-1684.

Velocity Measurements by the "One-Orange Method", B. A. Christensen, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p76-85.

Friction factor

Bed Rivers and Mountain Torrents, Dieter Rickenmann, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p672-676.

Analyzing Field Data for Hazen-Williams and Darcy-Williams Femalium Proceeded Clark (Hydraulic et Birre.)

Weisbach Equations, Donald Clark, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p1-9.

Dimensionally Homogeneous Manning's Formula, Ben Chie Yen, HY Sept. 92, p1326-1332.

The Effect of Live Load on Downdrag Forces, Samuel A. Leifer, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p949-961.

Flow Capacity of Rehabilitated Sanitary Sewers, Kenneth K. Kienow, Karl E. Kienow and Paul E. Kienow, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p28-42.

Flow Resistance of High-Gradient Gravel Channels, R. G. Millar and M. C. Quick, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p717-721.

Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994, 0-7844-0024-5, 502pp.

Specification Contract Effects on Hydraulic Designs, Jeff Baysinger and Leo Kinney, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p152-158.

Study of Friction Factors in the Upper Reaches of the Rio Grande, Cassie C. Klumpp and Drew C. Baird, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p702-706.

Down Drag on Friction Piles: A Case History, Yalcin B. Acar, R. Richard Avent and Mohd R. Taha, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p986-999.

Effect of Boundary Conditions on Buckling of Friction Piles, Mohammed A. Gabr, Jibai Wang and Sam A. Kiger, EM June 94, p1392-1400.

Friction resistance

Experimental Behavior of Polymeric Geogrids in Pullout, Ragui F. Wilson-Fahmy, Robert M. Koerner and Leonard J. Sansone, GT Apr. 94, p661-677.

Fringe benefits

Packaging Benefits Packages, Michael W. Creed, Christie C. Allen and C. Janet Whitney, ME Jan./Feb. 94, p19-22.

Pipe Uplift Resistance in Frozen Soil and Comparison with Measurements, A. Foriero and B. Ladanyi, CR Sept. 94,

Racine's Water Street Retaining Wall, Steven W. Hunt, Randy L. Frank, Paul A. Tarvin and James J. Blazek, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p137-154.

Frost penetration

Frost Susceptibility of Concrete in Near-Saturated States, B. V. Enüstün, K. S. Soo and K. L. Bergeson, MT May 94, p290-306.

Tire Chips Used as Pothole Preventers, CE Dec. 94, p19.

Froude number

Bridge Pier Scour Equations - An Assessment, Alimul Qadar and Sarfaraz A. Ansari, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p61-67.

Discharge Coefficient of Rectangular Side Weirs, R. Singh, D. Manivannan and T. Satyanarayana, IR July/Aug. 94, p814-819.

Flow patterns in a mountain stream, Lisa C. Hubbard and Colin R. Thorne, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p737-741.

Free-Surface Instability in Flow down Steep Rivers, Cheng-lung Chen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1264.

Mixing of Thermal Discharges at Low Froude Numbers, C. Liang Lee and Patrick J. Ryan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p538-542

Momentum and Energy Coefficients Based on Power-Law Velocity Profile, Cheng-lung Chen, HY Nov. 92,

p1571-1584.

A Numerical Study of Hydraulic Jump and Mixing in a Stratified Channel With a Sill, Ping Chen, R. Gra gram and Jianping Gan, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p119-133

Stability Principle of Critical Flow Depth in a Moving Coordinate System, Cheng-lung Chen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Ru-

mer, ed., 1994), p1263.

Theoretical study of unstable waves in the rapids of the river, H. Kyotoh, (Hydraulic Engineering '94, George Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1265-1269.

Frozen soils

Pipe Uplift Resistance in Frozen Soil and Comparison with Measurements, A. Foriero and B. Ladanyi, CR Sept. 94,

Fuel consumption

Design Basis Spent Nuclear Fuel Characteristics, Peter Gottlieb and J. Kevin McCoy, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p845-851.

Effects of Axial Burnup Distributions on the Reactivity of Spent Fuel, Theodore A. Parish, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p744-751.

Fitted Analytical Expressions Giving the Enrichment in U235 of a Fresh Fuel Equal to a Spent PWR Fuel, J. Anno, (High Level Radioactive Waste Management, High Level Radioactive Waste Management, 1994), p757-764.

High-Burnup/Low Cooling-Time Fuel Carrying Capacity of the GA-4 and GA-9 Spent Fuel Shipping Casks, J. K. Boshoven and J. E. Hopf, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p913-917.

PWR Axial Burnup Profile Database, R. J. Cacciapouti, S. Van Volkinburg and L. A. Hassler, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p739-743.

System Impacts of Fuel (Age and Burnup) Selection, Flora Emami, William Bailey and Mark Fleming, (High Level Radioactive Waste Program Committee, 1994), p1538-1542.

What Do We Mean By a "Cold Repository"? William G. Halsey, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2183-2188.

Fuel economy

Breakout Session 6C: Alternative Fuels, Ovi Colavincenzo, Gerald Esper and Peter Hagerty, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994),

Strategic Ship Routing Impacts of Temporal Coverage with Real-time Satellite Altimeter-Based Current Information, Young-Kyun Lee, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p483-489.

Fuels

Bio-Remediation of Simulated Fire Training Facility, Don-ald P. Butcher and Peter C. Gaskin, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p127-136.

Breakout Session 6C: Alternative Fuels, Ovi Colavincenzo, Gerald Esper and Peter Hagerty, (Transportation Plan-ning and Air Quality II, Thomas F. Wholly, ed., 1994),

The Challenge of Mining He-3 on the Lunar Surface: How All the Parts Fit Together, Igor N. Sviatoslavsky, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p668-677.

Finding New Forms of Fuel, ET Aug./Sept. 94, p10.

Helium-3 on the Moon: Model Assumptions and Abundances, Lawrence A. Taylor, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p678-686.

Nuclear Propulsion, Evan Dudley, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway,

ed. and Stanley Lokaj, ed., 1994), p761-764.

Performance of Fuel-Resistant Sealers for Asphalt Concrete Pavements, James E. Shoenberger, MT Feb. 94, p137-149.

Remote Sensing of Astrofuel™, K. R. Harris, H. Y. Khater and G. L. Kulcinski, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p648-657.

TOPAZ II Qualification and Nuclear Testing Program, G. L. Schmidt, F. Thome, B. Ogloblin and E. Glushkov, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p729-738.

Transport Infrastructure Choices for Industrial Cis-lunar Traffic, John Sved, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p587-596.

The Use of Secondary Products in the Cement and Concrete Industry, Bjarne Osbaeck, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p107-121.

Use of Wastes as Fuels in the Cement Industry: Pros & Cons, Ferenc D. Tamás and Márta Pátkai-Horváth, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p82-102

Utilization of Waste Solvent Fuels in Cement Manufacturing, Gregory S. Barger, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p41-55.

Full-scale tests

Deformations in Composite Prestressed Concrete Bridge Deck Panels, Robert E. Abendroth, ST Nov. 94, p3223-

Elastic Buckling Strength of Gusset Plate Connections, J. J. Roger Cheng, Michael C. H. Yam and S. Z. Hu, ST Feb. 94, p538-559.

Fire Resistance of Fire-Resistant Steel Columns, Sakumoto, T. Yamaguchi, T. Okada, M. Yoshida, S. Ta-saka and H. Saito, ST Apr. 94, p1103-1121.

Lateral Response of Unreinforced Masonry Infill Frame Panels, James A. Hill, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p77-83.

Mitigation Measures for Small Structures on Collapsible Alluvial Soils, Kyle M. Rollins and G. Wayne Rogers, GT Sept. 94, p1533-1553.

Seismic Behavior of Open-Web Truss-Moment Frames, Subhash C. Goel and Ahmad M. Itani, ST June 94, p1763-1780.

Seismic Response of Full-Scale Five-Story Reinforced-Masonry Building, F. Seible, M. J. N. Priestley, G. R. Kingsley and A. G. Kürkchübasche, ST Mar. 94, p925-

Seismic-Resistant Special Truss-Moment Frames, Subhash C. Goel and Ahmad M. Itani, ST June 94, p1781-1797.

Simulated Seismic-Load Tests on Full-Scale Five-Story Masonry Building, F. Seible, G. A. Hegemier, Igarashi and G. R. Kingsley, ST Mar. 94, p903-924.

Tests on Deep I-Shape Pultruded Beams, A. Zureick and L. F. Kahn, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1572-1577.

WAK and Full-Scale Load Tests on Granular Fill, Kevin G. Sutterer, Karl W. Myers and Glenn J. Rix, (Vertical and Horizontal Deformations of Foundations and Embank-ments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p153-163.

Working Stress Design Method for Reinforced Soil Walls, Mauricio Ehrlich and James K. Mitchell, GT Apr. 94,

p625-645.

Functional analysis

Evaluation of Software for Analysis and Design of Reinforced Concrete Structures, Andrew D. Betaque and Kamal B. Rojiani, (Computing in Civil Engineering,

Kaniai B. Rojaani, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p466-473.
 Functional Analysis of the Envelope Design Process for Integrated Building Design, Hugues Rivard, Claude Bédard, Kinh H. Ha and Paul Fazio, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p71-78.
 Functional Analysis Using Partitioned Engineering Data Elow Model, D. H. Doweles Phos. and H. Crair Howard.

Flow Model, D. H. Douglas Phan and H. Craig Howard,

CP Jan. 94, p2-19.

Step-Function Response of Muskingum Reach, J. C. I. Dooge, M. Perumal and Q. J. Wang, IR Mar./Apr. 93, p410-415.

Funding allocations

Centralized Government Control: A Bad Idea, Paula P. Easley, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p53-78.

Civil Engineers Urge Congress to Fund National Highway System, NE Apr. 94, p2. Clinton Administration Outlines Superfund Plans, CE Feb.

94, p17-18.

The Cost of Water Reuse is a Benefit to All, Richard W. Harris and Jacqueline A. Millet, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p706-709.

DOT Unveils Proposed National Highway System, CE Feb.

The Effect the Central Utah Project Will Have On Water Conservation in Utah, Douglas Gilmore, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p25-28. Federal Design Competition Opens Fourth Round, CE

Sept. 94, p76.

Grazing for Funding: Agency Hydrodiplomacy, C. M. Rogers and J. E. Robinson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p561-564. Hazwaste Spending Boom to Continue, CE Feb. 94, p8.

High-Tech Excavation on President's List, CE Feb. 94, p8 ISTEA Enhances Transportation, Douglas L. Tober, CE Oct. 94, p64-66.

MPOS Become VIPS, John Prendergast, CE Apr. 94, p40-43 President Clinton Honors Federal Design Winners, CE July

94, p14,16. Transit Agencies May Face Shortfall, CE May 94, p8.

Furrow irrigation

Soil Water Model for Evaluating Water Delivery Flexibili-ty, Sophie Lamacq and Wesley W. Wallender, IR July/ Aug. 94, p756-774.

Fuzzy sets

Application of Fuzzy Logic and Neural Networks to Automatically Detect Freeway Traffic Incidents, Chien-Hua Hsiao, Ching-Teng Lin and Michael Cassidy, TE Sept./ Oct. 94, p753-772.

Application of Fuzzy Logic in Civil Engineering in Japan, Hitoshi Furuta, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1900-1907.

Automated Corrective Action Selection Assistant, Alan D. Russell and Aminah Fayek, CO Mar. 94, p11-33

Bridge Condition Rating Using Fuzzy Sets and an Eigenvector of Priority Settings, Hani G. Melhem and Senaka Aturallya, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1908-1915.

Computer Implementation of Fuzzy Reasoning in Tendering, C. M. Tam, K. C. Lam and Albert T. P. So, (Computing in Civil Engineering, Khalil Khozeimeh, ed.,

1994), p1357-1364.

Decision-Making Paradigm for Risk Assessment of Haz-ardous Wastes Using Fuzzy Sets, Timothy Ross, Joseph Trumm and Sunil Donald, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p200-207.

neering, Knain Knozetimen, etc., 1994), p200-207. Evaluating Multi-Purpose Reservoir Operations Using Fuzzy Dynamic Programming, Enrique Moncada, Darrell G. Fontane and Timothy K. Gates, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p111-114.

Evaluation of Projects for Rehabilitation of Highway Bridges, J. O. Sobanjo, George Stukhart and Ray W. James, ST Jan. 94, p81-99.

Fuzzy Modus Ponens Deduction Technique for Construc-tion Scheduling, Ricky Wai-Kin Wu and Fabian C. Hadipriono, CO Mar. 94, p162-179.

Intelligent Excavator Control for a Lunar Mining System, Paul J. A. Lever, Fei-Yue Wang and Degian Chen, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p97-105.

Linguistic Analysis of Risk in Project Planning, Roozbeh Kangari and Moataz Bakheet, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p216-219.

Methodology for Forensic Investigations of Seismic Damage, Duane Castaneda and Colin Brown, ST Dec. 94. p3506-3524.

Multiobjective Optimization of Actively Controlled Structures, S. S. Rao, (Analysis and Computation, Franklin Y.

Cheng, ed., 1994), p276-285.

Pavement Treatment in Ohio Transportation System, Sakchai Prechaverakul, Fabian C. Hadipriono, Roger L. Green, Richard D. Boyle and John A. Ray, (Comp in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1892-1899.

Personal Computer Model to Evaluate Performance of Construction Systems/Services, Dean T. Kashiwagi, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p502-506.

Sensitivity-Based Weighted-Average in Structural Damage Assessment, P. C. Pandey and S. V. Barai, CF Nov. 94, p243-263.

Gabions

Selection of Earth Retention Systems Using Expert System, V. Sinha, M. Arockiasamy and A. Sinha, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p418-

Gaging stations

Development of an Expert System for Daily Drought Monitoring, T. J. Chang, H. Zheng and X. A. Kleopa, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p630-639.

An Eye for Toxics, ET June/July 94, p10.

Propulsion Systems: Present and Future, John Paul Strachan, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p769-773.

Remote Sensing of Astrofuel™, K. R. Harris, H. Y. Khater and G. L. Kulcinski, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p648-657.

Garrelts, Jewell M.

Garrelts, 90, Dies; Was Bridge Engineer and Noted Educator, CE July 94, p66,68.

A Gas Sampling System for Withdrawing Humid Gases From Deep Boreholes, Joseph P. Rousseau, William Thordarson and Mark A. Kurzmack, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2139-2145.

Gas in Soil I: Detection and η-Profiling, Nader S. Rad and Tom Lunne, GT Apr. 94, p697-715.

The Impact of Buoyant, Gas-Phase Flow and Heterogeneity on Thermo-Hydrological Behavior at Yucca Mountain, Thomas A. Buscheck and John J. Nitao, (High Level Radioactive Waste Management, High Level Ra-dioactive Waste Program Committee, 1994), p2450-2474

Models for Source Term, Flow, Transport and Dose Astoucis for Source term, Flow, Transport and Dose Assessment in NRC's Iterative Performance Assessment, Phase 2, Timothy McCartin, Richard Codell, Robert Neel, William Ford, Rex Wescott, John Bradbury, Budhi Sagar and John Walton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1469-1479. The Performance of Unconfined Hollow Fiber Membranes as Pipe Flow and Mixed Flow Aerators, Drew W. Johnson and Michael J. Semmens, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p106-113.

Pressure-Driven Gas Flow in Heated, Partially-Saturated Porous Media, Franklin T. Dodge and Ronald T. Green, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p2217-2227

Saturation and Gas Migration Within Clay Buffers, Peter Grindrod, Michael Impey, Syra Saddique and Hiroyasu Takase, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2069-2075.

Scaling Behavior of Gas Permeability Measurements in Volcanic Tuffs, Vincent C. Tidwell, (High Level Radio-active Waste Management, High Level Radio-active Waste Program Committee, 1994), p2500-2509.

Thermosyphon Analysis of a Repository: A Simplified Model for Vapor Flow and Heat Transfer, Randall D. Manteufel and Mark W. Powell, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2207-2216.

Void Fraction Measurement Techniques for Gas-Liquid Bubbly Flows in Closed Conduits; A Literature Review, Mahmood Naghash, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p.278-288.

Gas formation

Reducing Emissions of Greenhouse Gases Ensures the Future (ltr), CE Apr. 94, p28.

Cas recovers

In-situ Extraction of Lunar Soil Volatiles, Layton J. Wittenberg, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p687-696.

Is It Possible to Colonize Mars? Jonathan Hurley and Steve Garcia, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p782-786.

Gasification

DOE Lab Develops System to Sack Sodium Nitrate, ET Apr./May 94, p10.

Gasoline

Change in Gasoline Constituent Mass Transfer During Soil Venting, Nancy J. Hayden, Thomas C. Voice, Michael D. Annable and Roger B. Wallace, EE Nov./Dec. 94, p1598-1614.

Thermally Enhanced Bioremediation of a Gasoline-Contaminated Aquifer Using Toluene Oxidizing Bacteria, Rula Deeb and Lisa Alvarez-Cohen, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p400-407.

Gates

Behavior of Cast-Iron Spillway Gate Wheels, Dimos Polyzois and Walter J. Muzyczka, MT Nov. 94, p495-512.

Formation and Propagation of Steep Waves: An Investigative Experimental Interpretation, P. G. Manciola, A. Mazzoni and F. Savi, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p283-297.

Impact Hydraulic Jump, Willi H. Hager, HY May 94, p633-637.

New Technology for Navigation Entrance Black River Canal, Larry Osborn, Kevin MacIntosh and Dave Werren. (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p.387-397.

Gaussian process

Reexamination of Convex Polyhedron Outcrossing Problem, Ove Ditlevsen, EM Mar. 94, p654-660.

Geodesy

Determination of Look Angles to Geostationary Communication Satellites, Tomás Soler and David W. Eisemann, SU Aug. 94, p115-127. Explorations in Geodesic Forms, Dimitra Tzourmakliotou, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p440-449.

A GIS Foundation Example, George Massey, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p2175-2182.

289

Hyper-Geodesic Structures: Excerpts from a Visual Catalog, Haresh Lalvani, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1053-1064.

Inertially Favorable Trajectories for Robot Motion in Space, Lyman J. Petrosky and Irving J. Oppenheim, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p.220-228.

Geodetic surveys

Band Width in Joint Adjustment of Geodetic Networks Having Common Points, Olcay Öztan, Yunus Kalkan, Zafer Kızılsu and Ufuk Özerman, SU Feb. 94, p3-10.

Geographic information systems

3-D Coordinates - A Universal Rectangular Coordinate System for a GIS and Other Spatial Databases, Earl F. Burkholder, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p233-240.

Algorithm for Precise Drainage-Basin Delineation, E. James Nelson, Norman L. Jones and A. Woodruff Miller,

HY Mar. 94, p298-312.

Application of a Geographic Information System to Evaluate Environmental Hazards, Mary J. S. Roth, Deborah L. Shaffer and Roger Ruggles, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p265-272.

ARC/HÉC2: an ARC/INFO - HEC-2 Interface, Dean Djokic, Mark A. Beavers and Chandrashekar K. Deshakulakarni, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), pd.1-44.

ASA.WAVES: An Interactive PC-based Wave Forecasting Tool, Stéphan T. Grilli, T. Opishinski, M. L. Spaulding and T. Isaji, Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p890-904.

Best Route GIS System, Siripong Malasri and L. Yu Lin, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1123-1130.

Combining a 2-D Flood Plain Model with GIS for Flood Delineation and Damage Assessment, P. Di Giammarco, E. Todini, David Consuegra, F. Joerin and F. Vitalini, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p171-182.

A Coupled GIS-Water Quality Modeling System, Chen-Yu Cheng, J. F. Atkinson and J. V. DePinto, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p247-251.

Creation of Land Information System for Milwaukee County, Wisconsin, Kurt W. Bauer, SU Nov. 94, p156-165.

A Decision Support System for Nonpoint Source Pollution Management Using a Distributed Model-GIS-DBMS Linkage, Jaewan Yoon and G. Padmanabhan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p402-409.

Developing a National Spatial Data Infrastructure, John McLaughlin and Sue Nichols, SU May 94, p62-76.

Development of a Geographical Information System for On Farm Management, Malinda Fowler, Don R. May, Omnia El-Hakim, A. Bennally, A. Johnson, S. Spaulding, Wilson Begay and Timothy K. Gates, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p132-135.

Development of an Experimental Watershed for Testing Nonpoint Source Pollution from Urban Runoff, Vassilios A. Tsihrintzis, Hector R. Fuentes and Rizwan Hamid, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1237-1241.

Efficacy of ARC/INFO GIS Application to Hydrologic Modeling, J. J. Warwick and S. J. Haness, WR May/June

94, p366-381.

Emergency Response Preparedness Analysis for Radioactive Materials Transportation, Emelinda M. Parentela, Shashi K. Sathisan, Sandeep S. Burli and Walter C. Vodrazka, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1249-1254.

Geographical Information Systems and Remote Sensing: a possible support in 2D modelling of flood propagation, F. F. Amighetti, P. P. Congiatu, A. Di Filippo and P. Molinaro, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale,

ed., 1994), p143-155.

GIS Application for Floodplain Analysis and Mapping, David J. Greenwood, Ramzi K. Bannura and Myles E. Powers, (Hydraulic Engineering '94, George V, Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p232-236

A GIS Foundation Example, George Massey, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2175-2182

GIS Matches As-Built Drawings with Reality, CE Jan. 94,

p13-14. GIS Modeling of Neo-Traditional Neighborhood Development, John R. Stone, Thomas H. Wittmann and Jonathan Boone, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1131-1138.

GIS Proves Invaluable in New York Watershed Study, Fos-ter Nichols, CC June 94, p1,7-9.

GIS-Based Channel Extraction and Smoothing Algorithm for Distributed Hydrologic Modeling, Fred L. Ogden, Bahram Saghafian and Witold F. Krajewski, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p237-241.

Graphical Network Model Simplifies Water Analysis, Michael D. Larkin, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p296-

Hydraulic Engineering '94, 2 vols, ISSN: 1070-1559, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994,

0-7844-0037-7, 1375pp.

Impervious Cover Extraction Using Remote Sensing/GIS, Stuart B. Murchison, John M. Hunt and Steven C (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p127-131

Implementation of Knowledge-Based GIS: A Case Study, Gary S. Spring, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1332-1338.

Integrated GIS for Construction Site Investigation, Amr R. Oloufa, Ahmed A. Eltahan and C. S. Papacostas, CO

Mar. 94, p211-222.

Integration of Water Resource Models and GIS for Water Resource Management, Roger T. Kilgore, Joseph S. Krolak and Michael Walsh, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p37-40.

Interactive Design of Service Routes, Jin-Yuan Wang and Jeff R. Wright, TE Nov./Dec. 94, p897-913.

Interfacing GIS and Water Quality Models for Agricultural Areas, Vassilios A. Tsilirintzis, Hector R. Fuentes and Rao K. Gadipudi, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p252-256.

Library of Congress Collecting GIS Maps, CE Apr. 94,

Minimizing the Probable Maximum Flood, Mark A. Woodbury, Douglas T. Eberlein and Nicholas Pansic, CE June 94, p64-65.

Mobile GIS Technologies, John Alexander, Jerry Merckel, Kirk Upthegrove and David Martini, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1623-1630.

Modeling Municipal Water Demands for a Pump Station Area, Bindu Reddy, Jerry Rogers, Theodore Cleveland, Lu-Chia Chuang and Kathlie Sheu, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p65-68.

Money-Saving Model, Carson Mettel, David McGraw and

Susanne Strater, CE Jan. 94, p54-56.

The National Spatial Data Infrastructure and its Usefulness to the Dredging Community, Milington Lockwood, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p516-525

Nonpoint-Pollution Model Sensitivity to Grid-Cell Size, Baxter E. Vieux and Scott Needham, WR Mar./Apr. 93,

p141-157.

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Objects: the CADD/GIS Common Denominator, Paul Scarponcini, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1764-1771.

Overflow Elimination Benefits from GIS Based Technolo-, Rod Thornhill, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p829-835.

Pipe Utility Evaluations With the Aid of GIS, Raymond A. Pittman, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p242-

Planning Model for Sewer System Rehabilitation, Edward H. Burgess, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p30-38.

Population Estimation Techniques for Routing Analysis, Shashi K. Sathisan and Anil K. Chagari, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p658-665.

Quality of Map Data in Geographic Information Systems, Gary A. Jeffress, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p221-224.

Regional Optimization of Non-Point Source Load Reducegional Optimization of Non-Point Source Losa Reduction, J. Thomas Franques and Rhonda L. Townsend, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p262-266.

Software for Settlement Analysis, John T. Christian, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio,

ed., 1994), p1718-1729.

Statistical and GIS Tools for Assessing Water Conservation Effects, Pen C. Tao, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p416-419.

Studying Route Choice Behavior Using Computer-Aided Telephone Interviews and GIS, Mohamed A. Abdel-Aty, Ryuichi Kitamura, Paul P. Jovanis, Prasuna Reddy and Kenneth M. Vaughn, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1343-1348.

Third Lake Watershed Assessment and Action Plan, Carey M. Brand, Gary E. Raasch and Marion E. Kessy, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p257-261.

TIGER and Census Bureau Data in a GIS: A Powerful Combination for Civil Engineers, Robert W. Marx, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p225-232.

Use of GPS for Tethered Satellite Position Determination, Bjorn L. Johns and George W. Morgenthaler, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p64-79.

Using Geographical Information Systems to Manage a Multipurpose Water Project, Stan B. Mattingly, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p33-36.

Using GIS Technology to Assess Hurricane Damage, C. S. Papacostas, Wayne M. Hamaguchi, Harold S. Hamada and John Jaquess, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p607-616.

Using GIS to Develop 2-D Hydraulic Models, Craig R. Wilkening, Lynn E. Johnson and Joel Herr, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p136-140.

Water Policy and Management: Solving the Problems, Dar-rell G. Fontane, ed. and Harry N. Tuvel, ed., 1994, 0-7844-0020-2, 900pp.

Using GPS to Improve Existing Classical Network, Szu-Pyng Kao and J. S. Bethel, SU May 94, p77-91.

Geological faults

Analysis of Earthquake Fault Rupture Propagation through Cohesive Soil, Jonathan D. Bray, Raymond B. Seed and

H. Bolton Seed, GT Mar. 94, p562-580.

Analysis of Flow Along Anisotropic Fractures in Partially Saturated Media, J. S. Y. Wang and B. L. Cox, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1915-

Doe's Topical Report on a Methodology to Assess Vibra-tory Ground Motion and Fault Displacement Hazards at the Yucca Mountain Site, David F. Fenster and Richard C. Quittmeyer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2260-2265.

Earthquake Fault Rupture Propagation Through Soil, Jonathan D. Bray, Raymond B. Seed, Lloyd S. Cluff and H. Bolton Seed, GT Mar. 94, p543-561.

Investigation of Faulted Tunnel Models by Combined Photoelasticity and Finite Element Analysis, Samaan G. Ladkany and Yuping Huang, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1979-1986.

Preliminary Analysis of Three-Dimensional Moisture Flow Within Yucca Mountain, Nevada, Gudmundur Bodvarsson, Gang Chen and Caroline Wittwer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2038-2047.

Preliminary Results of Paleoseismic Investigations of Quaternary Faults on Eastern Yucca Mountain, Nye County, Nevada, C. M. Menges, J. R. Wesling, J. W. Whitney, F. H. Swan, J. A. Coe, A. P. Thomas and J. A. Oswald, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2373-2390

Preliminary U-Series Disequilibrium and Thermolumines-cence Ages of Surficial Deposits and Paleosols Associated with Quaternary Faults, Eastern Yucca Mountain, J. B. Paces, C. M. Menges, B. Wildmann, J. R. Wesling, C. A. Bush, K. Futa, H. T. Millard, P. B. Maat and J. W. Whitney, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2391-2401.

Staff Technical Position on Consideration of Fault Displacement Hazards in Geologic Repository Design, Keith I. McConnell and Michael P. Lee, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2257-2259.

Structural Character of the Northern Segment of the Paintbrush Canyon Fault, Yucca Mountain, Nevada, Robert P. Dickerson and Richard W. Spengler, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2367-2372.

The Sundance Fault: A Newly Recognized Shear Zone at Yucca Mountain, Nevada, R. W. Spengler, C. A. Braun, L. G. Martin and C. W. Weisenberg, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p2359-2366.

Concept and Programme "Radioactive" Waste Disposal in Geological Formations of Ukraine, D. P. Khrushchov, M. P. Umanets and Eu. A. Yakovlev, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p2305-2309.

Constraining Local 3-D Models of the Saturated-Zone, Yucca Mountain, Nevada, G. E. Barr and Sharon A. Shannon, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p1814-1821.

Development of a Mechanical Alcove Excavator for the Yucca Mountain Exploratory Study Facility, Erika Rönnkvist, James E. Friant and Levent Ozdemir, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p411-416.

Development of Stochastic Indicator Models of Lithology, Yucca Mountain, Nevada, Christopher A. Rautman and Thomas H. Robey, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2510-2519.

Enhancing Nuclear Waste Disposal Safety by Exploiting Regional Groundwater Flow-An Exploratory Proposition, József Tóth and Grant Sheng, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1797-1804.

Exploratory Studies Facility and Potential Repository Source Term, J. D. Smith, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p549-553.

Geoscientific Studies in the Tono Area, Japan, T. Nohara, T. Tsuboya, M. Yamakawa, H. Sakuma and Y. Yusa, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2243-2250.

Goals and Requirements for Scientific Lunar Rovers, Charles Meyer, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed. and Paul R. Klarer, ed.,

1994), p166-174.

Gravity and Megnetic Investigations of Yucca Wash, Southwest Nevada, V. E. Langenheim and D. A. Ponce, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p2272-2278.

Integrated Geology and Preliminary Cross Section Along the North Ramp of the Exploratory Studies Facility, Yucca Mountain, D. C. Buesch, R. P. Dickerson, R. M. Drake and R. W. Spengler, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1055-1065.

Li, Qizhi, Richard A. Schultz, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p2106-2111.
Modeling Heretogeneous Unsaturated Porous Media Flow at Yucca Mountain, Thomas H. Robey, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2678-2684.

Molluscs as Climate Indicators: Preliminary Stable Isoto and Community Analysis, Saxon E. Sharpe, Joseph F. Whelan, Richard M. Forester and Ted McConnaughey, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2538-2544.

Planning and Management of Change, Robert M. Nelson, Jr., C. Thomas Statton and Robin K. St. Clair, (High Level Radioactive Waste Management, High Level Ra-dioactive Waste Program Committee, 1994), p1722-

Results from the Kristallin-I Performance Assessment, Paul A. Smith, Piet Zuidema, Ian G. McKinley, Enzo Curti, Ryk A. Klos, Trevor Sumerling and Dan Galson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1648-

Safeguarding the Disposal of Canada's Used Nuclear Fuel, Deposation of Canada Social Netteria Pet, P. Baumgartner and G. R. Simmons, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p1782-1790.

Sensitivity and Probabilistic Analyses of the Impact of Climatic Conditions on the Infiltration Rate in a Variable Saturated Multilayered Geologic Medium, A. Berge Gureghian, Aaron R. DeWispelare and Budhi Sagar, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1622-1633.

Shaft Performance in Taylor Marl—Field Measurements vs. Numerical Modeling, David B. Spires, Fei Duan and Marek Mrugala, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p779-784.

Site Effects on Strong Shaking and Seismic Risk: Recent Developments and Their Impact on Seismic Design Codes and Practice, Raymond B. Seed, Stephen E. Dickenson and Chin Man Mok, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p573-

The Variability of Large Alluvial Rivers, Stanley A. Schumm, ed. and Brien R. Winkley, ed., 1994, 0-7844-0054-7, 467pp.

Geometric nonlinearity

Load-Carrying Mechanism of Restrained Plates at Large Deflections, Zhiliang Fan, EM June 94, p1388-1391.

Parametric Study of Axisymmetric Circular-Glass Plates, C. V. Girija Vallabhan, Y. C. Das and Manjunatha Ramasamudra, ST May 94, p1663-1671.

Response of Space Trusses During Progressive Failure, George E. Blandford and Shien T. Wang, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), pl-16.

Wind-Induced Nonlinear Lateral-Torsional Buckling of Cable-Stayed Bridges, Virote Boonyapinyo, Hitoshi Yamada and Toshio Miyata, ST Feb. 94, p486-506.

Geometr

Adaptability of Translation-Grid Shells, J. G. Oliva Salinas, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed.,

1994), p133-141.

Determination of Geometry and Stress Distribution of an Optimal Stable Channel, Gregorio G. Vigilar, Jr. and Panayiotis Diplas, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p959-963.

Effect of Pier Geometry on Scour in Graded Gravels, Luis Ayala and Francisco Grandón, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p73-77.

Equilibrium Geometry of Channels with Cohesive Banks, R. G. Millar and M. C. Quick, (*Hydraulic Engineering* '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p964-968.

Evolutionary Methods for Synthesis of Truss Topology, Fang Zhao, Sushii J. Louis and Mihaly Lenart, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1816-1823.

Fractals, Fractures, and Size Effects in Concrete, Victor E. Saouma and Christopher C. Barton, EM Apr. 94, p835-854

Geometric Characterization of Road Humps for Speed-Control Design, T. F. Fwa and L. S. Tan, TE July/Aug. 92, p593-598.

Geometric Design of Compound Horizontal Curves, B.K. Roy, TE July/Aug. 94, p674-683.

Glass-covered Lightweight Spatial Structures, Jörg Schlaich and Hans Schober, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1-27.

Hyper-Geodesic Structures: Excerpts from a Visual Catalog, Haresh Lalvani, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina

U. Penalba, ed., 1994), p1053-1064.

Ice Accumulation Rate and the Geometry of Ice Jams in River Bends, Gilberto E. Urroz and Robert Ettema, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p386-390.

Incipient Hydraulic Jump at Channel Junctions, George C. Christodoulou, HY Mar. 93, p409-421.

Nonlinear Geometric and Material Behavior of Shell Structures with Large Strains, S. A. Schimmels and A. N. Palazotto, EM Feb. 94, p320-345.

Numerical Simulations of the CCS under the Joint Effects of Coastal Geometry and Surface Forcing, Yuhe Song and Dale Haidvogel, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p216-234.

Prisms and Antiprisms, Pieter Huybers and Gerrit van der Ende, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed. 1909, p.1421 E.

ed., 1994), p142-151.

Simple Numerical Method for Solving Horizontal Circular Curves, Said M. Easa, SU Feb. 94, p44-48.

Space Frames and Polyhedra, J. François Gabriel, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1036-1044.

Streamflow Related to Channel Geometry in Northern New England, Kevin J. Palaia and S. Lawrence Dingman, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p865-869

A Symbol-form Mapping Framework for Conceptual Design Support, S. R. Gorti and D. Sriram, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1591-1598.

Theoretically-Derived Regime River Width, Pierre Y. Julien, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p949-953.

Toughness Characterization of Steel-Fiber Reinforced Concrete, Jean-Francois Trottier and Nemkumar Banthia, MT May 94, p264-289.

Geomorphology

Analysis of Levee Design in a Mountain River Using Two-Dimensional Flow Modeling, Diane M. L. Mas, Andrew J. Miller, James A. Smith and Wei-hao Chung, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p757-761.

Boundary Conditions and Flow Patterns in a Mountain River, Andrew J. Miller, Diane M. L. Mas, James A. Smith and Wei-Hao Chung, (*Hydraulic Engineering* '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p762-766.

A Mechanism of Pool Formation and Maintenance in Forest Streams, Richard D. Smith and Robert L. Beschta, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p824-828.

Step Pool Geometry and Flow Characteristics in Lowsediment-Storage Channel Beds, Tamir Grodek, Moshe Inbar and Asher P. Schick, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p819-823.

Tree-Rings and Climate: Implications for Great Basin Pale-oenvironmental Studies, Donald A. Graybill, M. R. Rose and Fred L. Nials, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p.2569-2573.

Geophysical surveys

A Characterization Study of Fractured Rock, Kenzi Karasaki, Barry Freifeld and Cliff Davison, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2423-2428.

Site Investigation Surveys for Dredging Projects, S. J. Plasman and J. Peuchen, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p322-331.

Coordi

ASCE 1994 Atlanta Convention and Exposition, Oct. 9-13 "Civil Engineers- Champions for the Global Environment", NE Dec. 94, p8-10.

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Making an Olympic Stadium and a Baseball Park, Scott W. Braley and David P. Tabor, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p188-192.

Marta North Line Midtown Station, Jerzy T. Jacak and Cheryl L. McAfee, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p176-181.

One Ninety One Peachtree and NationsBank: Composite Additions to the Atlanta Skyline, P. V. Banavalkar and J. P. Colaco, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p170-175.

One Peachtree Center: Atlanta Georgia, Housh Rahimzadeh and M. Nasim Akhtar, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p164-169.

Planes, Trains and the Games, John Prendergast, CE Aug. 94, p38-41.

Pregame Show, Paul Tarricone, CE Aug. 94, p34-37.

Surety's Liability: No Release in Sight, CE Sept. 94, p27. Talmadge Bridge Replacement, Michael Abrahams and Man-Chung Tang, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p182-187.

Geosynthetics

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Geosynthetics Conquer the Landfill Law, Luther Derian, Edward Kavazanjian, Jr., Michael S. Snow and Kelly M. Gharios, CE Dec. 93, p50-53.

How Do Geosynthetics Improve Pavement's Performance, Imad L. Al-Qadi, Thomas L. Brandon, Timothy E. Smith and Bruce A. Lacina, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p606-616.

Interface Shear-Strength Properties of Roughened HDPE, Marc E. Orman, GT Apr. 94, p758-761.

Landfill Liner Interface Strengths from Torsional-Ring-Shear Tests, Timothy D. Stark and Alan R. Poeppel, GT Mar. 94, p597-615.

Performance of Anisotropic Geosynthetic-Reinforced Co-hesive Soil Mass, Hoe I. Ling and Fumio Tatsuoka, GT July 94, p1166-1184.

Performance Summary of the Tanque Verde Project-Geogrid Reinforced Soil Retaining Walls, James G. Col-lin, Donald G. Bright and Ryan R. Berg, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p43-56.

Product Suppliers Shouldn't Write Geosynthetic Specs (ltr), CE Aug. 94, p30-31.

Geotechnical engineering

1988 Armenia Earthquake. I: Seismological, Geotechnical, and Structural Overview, M. K. Yegian, V. G. Ghahraman and G. Gazetas, GT Jan. 94, p1-20.

Automatic, Remote, Multiplexed Geotechnical Measure-ments with Time Domain Reflectometry (TDR), Charles H. Dowding and Fei-chiu Huang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1220-1227.

Hybrid Finite Element/Discrete Element Model for Large point rimite Element/Discrete Element widdel for Large Deformation Geotechnical Engineering Problems, Isao Ishibashi, Tarun K. Agarwal and You Wang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p857-864.

Identifying Causes of Failure in Providing Geotechnical and Environmental Consulting Services, Douglas C Moorhouse and Richard A. Millet, ME May/June 94, p56-64.

An International Knowledge Database for Ground Improvement Geo-Systems, C. John Yoon, Theva Thevanagayam and Ilan Juran, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p277-284.

Lessons Learned From Missed Predictions, John A. Focht, Jr., GT Oct. 94, p1651-1683.

A Simple Method of Producing Lunar Soil Simulants for Engineering Studies, Koon Meng Chua, Scott Pringle and Stewart W. Johnson, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p867-877.

'Geoumbrella' in the Offing, CE July 94, p19.

Geotextiles

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Lunar Base Construction Using the Reinforce Earth Method with Geotextile, Mikiya Okumura, Yasuhiro Ohashi, Takao Ueno, Shojiro Motoyui and Kiosuke Murakawa, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1106-1115.

New Applications and Practices for Beneficial Uses of Dredged Material, M. C. Landin, J. Fowler and H. H. Allen, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994),

Proposed Rule on Recycled Geotextiles Stirs Controversy, CE Oct. 94, p14,17.

Geothermal energy

Evaluation of the Pagosa Springs Geothermal Reservoir and Implications of Potential Additional Reservoir Development, Jon Ford and Dennis McGrane, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p376-379.

Geothermal powerplants
Valuation Analysis for Independent Power Project,
Richard K. Ellsworth, EY Aug. 94, p86-96.

Clearing the Air with Japan, Germany, CE Feb. 94, p8.

Messeturm Tower: Frankfurt, Germany, Irwin G. Cantor and Ahmad Rahimian, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1550-1555.

Girders

Combined Boundary Element / Finite Strip Analysis of Bridges, M. S. Cheung, Georges Akhras and W. Li, ST Mar. 94, p716-727.

Distress in Prestressed Concrete Roof Girders at a Cement Plant, W. P. S. Dias, A. D. C. Jayanandana, M. C. M. Fonseka and A. A. D. A. J. Perera, CF Feb. 94, p6-15.

Fundamental Considerations of Design and Durability in Composite Rehabilitation Schemes for Steel Girders with Web Distress, S. B. Shulley, X. Huang, V. M. Kar-bhari and J. W. Gillespie, Jr., (Infrastructure: New Mate-rials and Methods of Repair, Kim D. Basham, ed., 1994), p1187-1194.

Horizontally Curved Steel Bridge Research-Update 2, S. R. Duwadi, J. M. Yadlosky and C. H. Yoo, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1071-1076.

Object-Oriented Structural Analysis with Substructures, Richard Sause and Jun Song, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p153-160.

One Ninety One Peachtree and NationsBank: Composite Additions to the Atlanta Skyline, P. V. Banavalkar and J. P. Colaco, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p170-175.

The Tatara Bridge - World's Longest Cable-Stayed Span, Manabu Ito and Takeo Endo, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p677-

Tests of Full-Size Pretensioned AASHTO Beams with Debonded Strands, O. Abdalla, J. A. Ramirez and R. H. Lee, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1409-1414.

Glacial till

Air Permeability from Pneumatic Tests in Oxidized Till, Kenneth B. Edwards and LaDon C. Jones, EE Mar./Apr. 94, p329-347.

Analysis of Glass-Ceramic Production from Lunar Resources, W. H. Poisl, B. D. Fabes, D. Allen, S. Hawley and A. Carpenter, Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1278-1287.

Calculation of k_{eff} For Plutonium in High-Level Waste Packages, Paige R. Zielinski and William G. Culbreth, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p679-683.

High Level Waste Disposal and Reprocessing in the UK, Nicholas L. Griffin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1690-1695.

Immobilizing the Calcined High Level Waste in Glass and Crystalline Phases, S. V. Raman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1124-1130.

Long Term Stability of Natural Glasses, Vladimír Knob-loch and Lumír Nachmilner, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1066-1068.

Lunar Oxygen Production - A Maturing Technology, Carlton C. Allen, Gary G. Bond and David S. McKay, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1157-1166.

A Practical Design and Construction of Tension Rod Supported Glazing, Toru Takeuchi, Haruyuki Kitamura, Kimiaki Harada, Kohei Higuchi, Akiho Harada and Mamoru Iwata, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p684-693.

Reservoir Estimates for the Sulpicius Gallus Region, Bonnie Cooper, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p889-896.

Results of Drip Tests of Sludge-Based and Actinide-Doped Glasses, J. K. Bates and E. C. Buck, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p1088-1101.

Strength of New Heat Treated Window Glass Lites and Laminated Glass Units, H. Scott Norville, Paul M. Bove, Darrel L. Sheridan and Stacey L. Lawrence, ST Mar. 93, p891-901.

Fiber Composite Warp for Rehabilitation of Concrete Structures, Salem S. Faza and Hota V. S. GangaRao, (In-frastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1135-1139.

High Modulus Glass-ceramic Fiber Reinforced Composites for Currently Emerging Infrastructure Applications, Frederick T. Wallenberger, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994),

p272-279.

Research of Strength and Deformations with Long-time Loading and the Use of Glassfiber Reinforced Concrete in Shells, G. K. Khaidukov and M. M. Lachinov, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p340-349.

Edge Strength of Window Glass by Mechanical Test, Chris P. Pantelides, Gregory P. Sallee and Joseph E. Minor, EM May 94, p1076-1090.

Glass-covered Lightweight Spatial Structures, Jörg Schlaich and Hans Schober, (Spatial, Lattice and Ten-sion Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1-27.

Parametric Study of Axisymmetric Circular-Glass Plates, C. V. Girija Vallabhan, Y. C. Das and Manjunatha Ramasamudra, ST May 94, p1663-1671.

Glass reinforced plastics

FRP Box-Beams Under Long-Time Static and Fatigue Loading, Urs Meier, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p411-416.

Global positioning
Data Capture with GPS for Sewer Map Updates, John S. Gresh and Rodolfo B. Fernandez, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1615-1622

Development of Functional Characteristics of Vehicle Mounted Plastic Scintillation System, John G. Follette, Jeffrey J. Tappen and Christopher T. Briggs, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1964-1970.

GPS Goes Real Time, Carl W. Sumpter and Gregory W. Asher, CE Sept. 94, p64-66.

GPS-Based Control for Space Vehicle Rendezvous, Kurt R. Zimmerman and Robert H. Cannon, Jr., (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p61-69.

Mobile GIS Technologies, John Alexander, Jerry Merckel, Kirk Upthegrove and David Martini, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994).

p1623-1630.

Modeling of GPS Systematic Errors in Monitoring and

Control Surveys, Adam Chrzanowski and Yong-qi Chen, SU Nov. 94, p145-155. OTF Kinematic GPS Positioning for Vertical Reference Datum, Al Rougeau, Dean Pottle and Larry Rosenbalm, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p288-Quality Control with Reliability for Large GPS Networks,

Alfred Leick and Michael B. Emmons, SU Feb. 94, p25-41

Stake No More?, ET Dec. 94/Jan. 95, p11.

URSULA: Design of an Underwater Robot for Nuclear Re-actor Vessel Inspection, J. Barry Fallon, Steven B. Shooter, Charles F. Reinholtz and S. William Glass, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p311-319.

Use of GPS for Tethered Satellite Position Determination, Bjorn L. Johns and George W. Morgenthaler, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p64-79.

Using GPS to Improve Existing Classical Network, Szu-Pyng Kao and J. S. Bethel, SU May 94, p77-91. Using Pen Computers in Post-Disaster Insurance Claim Settlements, Raja R. A. Issa, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2145-2148.

Global warming

Climate Change Impacts on Boston's Water Supply, Paul H. Kirshen and Neil M. Fennessey, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p489-492.

Effects of Global Warming on Hurricane-Induced Flood-ing, William J. Gutowski, George F. McMahon, Shing S. Schluchter and Paul H. Kirshen, WR Mar./Apr. 94,

p176-185

Global Environmental Change: Geoengineering Technology, Lyle M. Jenkins, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p524-531. Global-Warming Debate Continues (ltr), CE July 94, p28-

Warm Weather Ahead?, ET Oct./Nov. 94, p11.

The World is Coming to an End: E. B. Rice Memorial, William L. Ryan, CR Sept. 94, p87-92.

"The Potential for the Department of Defense to Use Space-Based Remote Sensing to Support DOD and Other Government Agencies' Environmental Programs", Donald R. Artis, Ir., (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p542-552.

Glossaries

Glossary of Mapping Science, ISBN: 1-57083-011-8, Joint Committee of the American Society of Civil Engineers, American Congress on Surveying and Mapping, and American Society for Photogrammetry and Remote Sensing, 1994, 0-7844-0050-4, 581pp. Glues

Glulam Gets New Layers, New Strength and New Uses, ET Aug./Sept. 94, p8-9. In Rehab We Trust, Benjamin Lavon, CE Sept. 94, p73-74.

Development of Hardwood Glulam Timber Bridge Standards, H. B. Manbeck, J. J. Janowiak, P. R. Blankenhorn and P. Labosky, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1304-1309.

Innovations in Glulam Timber Bridge Design, Michael A.

Ritter, Thomas G. Williamson and Russell C. Moody, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1298-1303.

Natural Decay Resistance of Glued-Laminated Beams, Stephen L. Quarles, Kevin A. Flynn, William A. Dost and Mark G. Dietz, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p707-712.

Reinforced Concrete Beams with Plates Glued to Their Soffits, Deric John Oehlers, ST Aug. 92, p2023-2038.

Difficulties with Implementation of Goal Setting for Construction, Ahmad Hadavi and Raymond J. Krizek, ME Sept./Oct. 94, p48-54.

Goal Programming Model for Distributing and Blending Desalinized Water, Abdulaziz S. Alidi and Taqi N. Al-Faraj, WR May/June 94, p267-275.

Partnering in Small Packages, Gary D. Bates, ME Nov./ Dec. 94, p22-23.

Risk Variability from Uniform Soil Remediation Goals for PCBs, Paula A. Labieniec, David A. Dzombak and Robert L. Siegrist, EE May/June 94, p495-512.

Survival Skills, Michael A. Branton and Curry W. Kirkpatrick, CE June 94, p68-69.

Isotopic Tracers of Gold Deposition in Paleozoic Lime-stones, Southern Nevada, Z. E. Peterman, B. L. Wid-mann, B. D. Marshall, J. N. Aleinikoff, K. Futa and S. A. Mahan, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1316-1323.

Golden Gate Bridge

Nonlinear Analysis and Experimental Validation of a Stiffening Truss Chord of the Golden Gate Bridge, R. A. Dameron, R. S. Dunham and J. C. Castro, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1106-1114.

Government agencies

Categorization of Department of Energy Spent Nuclear Fuel, Denzel L. Fillmore, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p315-319.

Decision Aids for Enhancing Intergovernmental Interac-tions: The Prenotification Analysis Support System (PASS), Marcus Lester, Edward Liebow and Judith Holm, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p168-175

Development of the Sheboygan Waterfront Sheboygan, Wisconsin, Robert Doyle, Fred A. Klancnik and Robert Petersen, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed.,

1994), p552-561

The Impact of the Doe Decision Making Process at the Waste Isolation Pilot Plant with Respect to Petroleum Reserves, Matthew Silva, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p1753-1761.

Increasing the Credibility of Scientific Analyses, Thomas A. Cotton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p296-300.

Negotiating Equity for Management of DOE Wastes, Sam A. Carnes, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1-8.

On "Solid" Golden Pond, Ronald J. Arceneaux and Dale L. Watson, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p170-179.

Overview and Status of NRC's High-Level Waste Repository Program, Mark S. Delligatti, Joseph J. Holonich and B. J. Youngblood, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1597-1603.

P3 for Marinas, Parks & Recreation, Richard Milbrodt,

P3 for Mannas, Parks & Recreation, Richard Milbrodt, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p180-186. Partnering in Environmental Restoration: The Coastal America Model, William L. Klesch, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p449-452. Policy Leves of Temperoting Spare Nuclear Eval by Pail

Policy Issues of Transporting Spent Nuclear Fuel by Rail, H. Barry Spraggins, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p163-167

Redefining Public Involvement, Dennis J. Unsworth, ME

July/Aug. 94, p13-15.

Secretary of Energy Review of the Civilian Radioactive Waste Management Program, Christopher A. Kouts, Allen B. Benson and Patricia Van Nelson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p9-12.

Stakeholder Involvement in System Architecture Decisions, Dwight Shelor and Ruane Langton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1609-1613.

Water-Quality Data Management: Survey of Current Trends, Laurel Saito, Neil S. Grigg and Robert C. Ward,

WR Sept./Oct. 94, p587-612.

Waterfront Renaissance Racine, Wisconsin, Thomas N. Wright, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p544-551

The Potential for the Department of Defense to Use Space-Based Remote Sensing to Support DOD and Other Government Agencies' Environmental Programs", Donald R. Artis, Jr., (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p542-552.

Government organization

'Rego' Starts at Burec, CE June 94, p8.

Government policies Drawing Conclusions as to Environmental Regulation, william Whipple, Jr., Harlan Agnew, Michael L. Clar, Robert Fiehweg, Tad Foster, Howard Holme, Marshall Jennings, Jonathan Jones, Joan Lee, Jan Rosholt, Charles Sain, Kyle Schilling, Earl Shaver and Don Woodward, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p258-271.

Federal Public Works Infrastructure R&D: A New Perspective, Report No. 93-EF1003, Civil Engineering Research

Foundation, 1993, 0-87262-943-0, 76pp.

Federal Risk Management Policy: Where Are the Prob-lems? Anthony J. Thompson, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p1-18.

Federal Risk Management Policy: Where Is the Federal Government Heading? Where Are the Problems? Jonathan W. Bulkley, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p331-337.

Preface and Executive Summary, Howard Holme, (National Water Resources Regulation: Where is the Environ-mental Pendulum Now?. Howard Holme, ed., 1994).

Reforming Japan's Public Works, Derek Dylan Bell, WP

Special issue 94, p6-9.

The Regulatory Process - - An Industry Perspective Responding to New Regulations, Gerald A. Hapka and Robert A. Reich, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p134-144.

Restoration of Wetland Ecosystems: A Challenge to Our Nation's Civil Engineers, James T. B. Tripp, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p229-

Government role

Drought and Water-Supply Management: Roles and Responsibilities. Neil S. Grigg and Evan C. Vlachos, WR Sept./Oct. 93, p531-541.

Grade control structures

Using Drop Structures for Stream Gaging, Bobby J.
Brown, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p21-26.

Gradient

Heavy Metal Removal from Soil by Coupled Electric-Hydraulic Gradient, Lutful I. Khan and M. Sahidul Alam, EE Nov./Dec. 94, p1524-1543.

Potential for Seepage Erosion of Landslide Dam, William Meyer, R. L. Schuster and M. A. Sabol, GT July 94,

p1211-1229.

Step-Pool Streams: An Adjustment to Maximum Flow Resistance, Athol D. Abrahams, Gang Li and Joseph F. Atkinson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p815-816.

Graduate students

Collaboration in the Engineering Classroom, Patricia G. Frantz, Gregory C. Frantz and John T. DeWolf, El July 93, p297-303.

Graduate study

Admission Requirements for Non-Civil Engineering Grad-uate Applicants, Richard H. McCuen and Allen P. Davis, EI Apr. 93, p163-169.

Water Resources Education and Research at a Model HBCU Water Resources Center, Victor I. Okereke, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p85-88.

Integrated Acoustic Seafloor Characterization, Peggy Murray, Ed DeAngelo, Jeff Parker and Thomas J. Fredette, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p295-

Physical Design Aspects of Capping Projects, James E. Clausner, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1132-1141.

Vapor Adsorption of Trichloroethylene on Quartz Sands of Varying Grain Size, David K. Kreamer, Karol J. Oja, S. M. Steinberg and Hugh Phillips, EE Mar./Apr. 94, p348-358.

Grain size analysis

Preliminary Screening Studies for Dredge Disposal Op-tions, Howard L. Cumberland, Barry J. Snyder and Wil-liam C. Lester, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p342-348.

Control of Settlement and Uplift of Structures Using Short Aggregate Piers, Evert C. Lawton, Nathaniel S. Fox and Richard L. Handy, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p121-132.

Creep Effects on Static and Cyclic Instability of Granular Soils, Poul V. Lade, GT Feb. 94, p404-419.

Effects of Oxidant on Thermal Regeneration of Granular Activated Carbon, Mark A. Waer and Vernon L. Snoeyink, EE Jan./Feb. 94, p190-201.

Micromechanics Modeling for Stress-Strain Behavior of Granular Soils. II: Evaluation, Ching S. Chang, Mohammed G. Kabir and Yang Chang, GT Dec. 92, p1975-1992

Modeling Fracture in Cemented Granular Materials, B. C. Trent and L. G. Margolin, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p54-69.

Resilient Moduli of Granular Materials, Musharraf Zaman, Dar-Hao Chen and Joakim Laguros, TE Nov./Dec. 94, p967-988.

Response Prediction of Granular Materials at Low Effective Stresses, Emir J. Macari-Pasqualino, Kenneth Runesson and Stein Sture, GT July 94, p1252-1268.

Granular media

Computer Modelling of Comminuting Granular Media, H. Alehossein and H.-B. Mühlhaus, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p660-667.

Deformations in Granular Soils Due to Cyclic Loading, P. M. Byrne and J. McIntyre, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1864-1896.

Dynamic Compaction of Loose Granular Soils: Effect of Print Spacing, Y. K. Chow, D. M. Yong, K. Y. Yong and S. L. Lee, GT July 94, p1115-1133.

Histological Analysis of Microstructure of UASB

Granules, H. K. Chui and H. H. P. Fang, EE Sept./Oct. 94, p1322-1326.

Numerical Simulations of Monotonic and Cyclic Loading of Granular Soil, Tang-Tat Ng and Ricardo Dobry, GT Feb. 94, p388-403.

One-Dimensional High-Pressure Compression of Granular Media, M. M. Hagerty, D. R. Hite, C. R. Ullrich and D.

J. Hagerty, GT Jan. 93, p1-18.

Seasonal Variation of Resilient Modulus of Subgrade Soils, Myung S. Jin, K. Wayne Lee and William D. Kovacs, TE July/Aug. 94, p603-616.

Seismic Bearing Capacity and Settlements of Foundations, R. Richards, Jr., D. G. Elms and M. Budhu, GT Apr. 93,

p662-674.

Settlement of Spread Footings on Granular Soil, Chandra S. Brahma, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p160-163.

Uplift Load-Displacement Behavior of Grillage Founda tions, Fred H. Kulhawy and Harry E. Stewart, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p233-244.

Graphic techniques

Graphic Visualization for Planning Heavy Lifts, Parmanand V. Dharwadkar, Koshy Varghese, James T. O'Connor and Thomas M. Gatton, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p759-766.

Three Graphics Presentation Packages You Can Count On, M. Kevin Parfitt, CC Jan. 94, p1-5.

Graphical analysis

GDE: New Approach to Graphical Modeling, M. Krzac-zek, CP Jan. 94, p103-124.

Graphical Network Model Simplifies Water Analysis, Mi-chael D. Larkin, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p296-

Mechanism of Biological Treatment in Plug-Flow or Batch Systems, Hasan Ali San, EE July/Aug. 92, p614-628.

A Real-Time Graphical Interface to a Two-Dimensional Groundwater Flow and Mass Transport Model, Robert C. Speake, Jr. and Kay S. Capps, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2081-2103

Graphite fibers

Behavior of Bolted Joints in 3-D Braided Composites, Rona L. Reid and Aly El-Shiekh, (Engineering, Con-struction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p287-295.

Behavior of Graphite/Epoxy Concrete Composite Beams, M. Saiidi, F. Gordaninejad and N. Wehbe, ST Oct. 94,

p2958-2976.

Graphite Prestressed Concrete Deck for Navy Facilities, Srinivasa L. Iyer, Vijayakumar Ranganathan and Randy Bagby, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p400-407.

Graphite Prestressed Piles and Fiberglass Prestressed Pilecaps for U.S. Navy Pier at California, Srinivasa L. Iyer and Ramabhadran Sivakumar, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 2015) 1994), p392-399.

Mechanics of Curved Fiber Bundles in Composites, David W. Jensen, Suresh P. Pai, Timothy R. Pickenheim and Colleen M. McCarty, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p276-286.

Graphs

Instantaneous-Unit Sediment Graph, N. S. Raghuwanshi, R. A. Rastogi and Santosh Kumar, HY Apr. 94, p495-503.

A Design for a Football Stadium Roof Enabling Growth of a Natural Grass Playing Surface: Sydney Football Stadium - Australia, G. S. Ramaswamy, D. S. Thomas, I. Norrie and L. Thorogood, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p28-37.

Effects of Golf Course Management on Pesticide and Fer-tilizer Fate, S. K. Starrett, N. E. Christians and T. A. Austin, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p526-

533.

Milwaukee County Parks' Brown Deer Golf Course Lands P. G. A. Tour Event: A Gem of a Golf Course is Polished to a New Brilliance, Steve Bailey, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p536-543.

An Alternative Equation for the Mean Velocity in Gravel-Bed Rivers and Mountain Torrents, Dieter Rickenmann, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p672-676.

An Analysis of Flow Velocity Profiles, Stream Bed Rough ness, and Resistance to Flow in Natural Gravel Bed Streams, Normand E. Bergeron, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p692-696.

Becker Test Results from Gravel Liquefaction Sites, Leslie F. Harder, Jr., (Ground Failures Under Seismic Condi-tions, Shamsher Prakash, ed. and Panos Dakoulas, ed.,

1994), p201-220.

Bed Load Prediction in Steep Mountain Rivers, Tamotsu Takahashi and Toyoaki Sawada, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p810-814.

Bed Load Roughness in Supercritical Flow, Scott E. Stonestreet, Ronald R. Copeland and Darla C. McVan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p747-751.

Bed Material and Numerical Modeling in a Gravel/Cobble Bed Stream, Robert T. Milhous, Russell A. Dodge and Perry L. Johnson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1055-1059

Behavior of Gravelly Soils During Seismic Conditions -An Overview, M. E. Hynes, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p117-120.

Bias in Regression Estimates of Manning's n, Kenneth L. Wahl, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p727-731.

Compacted High-Gravel-Content Subgrade Materials, William N. Houston, Sandra L. Houston and Kenneth D. Walsh, TE Mar./Apr. 94, p193-205.

Cyclic Behavior of Gravelly Soil, Mark D. Evans and Shengping Zhou, (Ground Failures Under Seismic Con-ditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p158-176.

Dynamic Properties of Gravel Layers Investigated by In-Situ Freezing Sampling, Takeji Kokusho and Yukihisa Tanaka. (Ground Failures Under Seismic Conditions. Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p121-140.

Dynamic Properties of Gravels Sampled by Ground Freezing, Shigeru Goto, Shin'ya Nishio and Yoshiaki Yoshimi, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994),

Effect of Gravel on Hydraulic Conductivity of Compacted Soil Liners, Thomas L. Shelley and David E. Daniel, GT Jan. 93, p54-68.

Effect of Pier Geometry on Scour in Graded Gravels, Luis Ayala and Francisco Grandón, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p73-77.

- Effects of Particle Shape on Bedload Transport, M. Moore and P. Diplas, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p800-
- Equilibrium Geometry of Channels with Cohesive Banks, R. G. Millar and M. C. Quick, (*Hydraulic Engineering* '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p964-968.
- Estimating Local Bed Shear Stress in Large Gravel-Bed Rivers, Peter R. Wilcock, Alan F. Barta and Conor C. C. Shea, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p834-838.
- Flow Resistance of High-Gradient Gravel Channels, R. G. Millar and M. C. Quick, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p717-721.
- Flow Velocity Profiles in Gravel-Bed Rivers, Vito Ferro and Giorgio Baiamonte, HY Jan. 94, p60-80.
- Gravelly Soil Properties Evaluation by Large Scale In-Situ Cyclic Shear Tests, Takaaki Konno, Munenori Hatanaka, Kenji Ishihara, Yukimi Ibe and Setsuo Iizuka, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p177-200.
- Ground Failures Under Seismic Conditions, Geotechnical Special Publication No. 44, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994, 0-7844-0055-5, 260pp.
- Identification and Characterization of Collapsible Gravels, Kyle M. Rollins, Ralph L. Rollins, Trevor D. Smith and George H. Beckwith, GT Mar. 94, p528-542.
- In-Situ Measurements of Dynamic Soil Properties and Liq-uefaction Resistances of Gravelly Soils at Keenleyside Dam, Ken K. Y. Lum and Li Yan, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p221-240.
- Large-Stone Aggregate-Modified Asphalt Mixes, Murari Man Pradhan and Joseph D. Armijo, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p627-634.
- Liquefaction and Embankment Failure Case Histories, 1988 Armenia Earthquake, M. K. Yegian, V. G. Ghahraman and R. N. Harutiunyan, GT Mar. 94, p581-596.
- Managing the Russian River Aggregate Resources, James J. Jordan, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p838-841.
- Monitoring Gravel Movement Using Radio Transmitters, Edward F. Chacho, Jr., William W. Emmett and Robert L. Burrows, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p785-
- Performance Evaluation of Offshore Breakwaters a Field and Computational Study, Andrew J. Chadwick, Chris-toper Fleming, Jonathan Simm and Geoffrey N. Bullock, Coastal Dynamics '94, A. S.-Arcilla, ed. Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p950-961.
- Physical Modelling of the Response of Shingle Beaches in the Presence of Control Structures, Tom T. Coates, (Castal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p924-937
- A Practical Perspective on Liquefaction of Gravels, Julio E. Valera, Michael L. Traubenik, John A. Egan and Jon Y. Kaneshiro, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p241-257.
- Relation of Unit Gravel Discharge to Mean Velocity, Lilian Posada-G and Carl F. Nordin, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1050-1054.
- Roughness Coefficient in Mountain Rivers, Alfonso Ugarte and Manuel Madrid, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p652-656.
- Selection of Gravel-Transport Formula for Stream Model-ing, Howard H. Chang, HY May 94, p646-651.

Shingle Movement Under Waves & Currents: An Instrumingle movement Under waves & Currents: An insur-mented Platform for Field Data Collection, George Voulgaris, Michael P. Wilkin and Michael Collins, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p894-909

Some Benefits of Grid by Number Sampling, David Crowder and Panayiotis Diplas, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p795-799.

Thresholds for Gravel and Cobble Motion, Katherine J. Chase, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p790-794

The Transport of Gravels in Boulder-Bed Streams, Alan F. Barta, Peter R. Wilcock and Conor C. C. Shea, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p780-784.

Development of a Partial Gravity Lunar Airlock, David John Gutierrez, (Engineering, Construction, and Opera-tions in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p227-236.

Gravity and Megnetic Investigations of Yucca Wash, Southwest Nevada, V. E. Langenheim and D. A. Ponce, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2272-2278.

Inertially Favorable Trajectories for Robot Motion in Space, Lyman J. Petrosky and Irving J. Oppenheim, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p220-228.

The Lunar Ultraviolet Telescope Experiment (LUTE), John D. Hilchey and Max E. Nein, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1431-1441.

Measurements of the Hydrodynamic Lift and Drag Forces Acting on Riprap Side Slope, A. F. Ahmed and F. S. El-Gamal, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p331-340.

Microgravity Research in a Space Station Environment, Steven D. Del Basso, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p473-482.

Stantey Lokaj, ed., 1994), p4/3-482.
A New LAX-WENDROFF Algorithm to Solve the Bed Continuity Equation With Slope Effect, Jean-Michel Tanguy, Bainian Zhang and Luc Hamm, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p134-148.

A Novel Gravity Compensation System for Space Robots, H. B. Brown, Jr. and J. M. Dolan, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul

R. Klarer, ed., 1994), p250-258

Pneumatic Conveying of Materials at Partial Gravity, Thomas A. Sullivan, Elissa Koenig, Christian W. Knud-sen and Michael A. Gibson, AS Apr. 94, p199-208.

Reducing the Long-Term Effects of Zero-Gravity, Jeremi-ah Rogers and Sarah Coleman, (Engineering, Construc-tion, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p833-836.

Space Station Microgravity Analysis and Assessment, John P. Wetzel, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p463-472.

Terrestrial Analogs: Implications for Lunar Lava Tubes, Cassandra R. Coombs and B. Ray Hawke, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1138-1145

Vertical Sorting Within Dune Structure, Mohamed Abdel-Motaleb, (Fundamentals and Advancements in Hydrau-lic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p139-148.

Wheel Space Station for 2025, Jason Hand and David Hargis, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p846-852.

Zero-Gravity Sports Centers, Patrick Collins, Takashi Fu-kuoka and Tsuyoshi Nishimura, (Engineering, Construc-tion, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p504-513.

"The Effect of Zero Gravity on Bones", Elizabeth Cassell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p853-856.

Gravity loads

Nonlinear Earthquake Analysis of Concrete Gravity Dams Including Sliding, Juan W. Chávez and Gregory L. Fenves, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p173-182.

Performance and Analysis of Frames With "URM" Infills, Khalid M. Mosalam, Peter Gergely and Richard N. White, (Analysis and Computation, Franklin Y. Cheng,

ed., 1994), p57-66.

Seismic Behavior of Non-Ductile Concrete Frame Struc-tures, Yahya C. Kurama, Stephen P. Pessiki, Richard Sause and Shaojie Wu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1496-1501. Stability of Masonry Piers and Arches Including Sliding,

Thomas E. Boothby, EM Feb. 94, p304-319.

Gravity sewers

Large Diameter Storm Sewer with Energy Dissipation Structures, Lynn Hill, John Maki and Jerry Pfarr, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p395-410.

Gravity waves

About the Range of Validity of Different Spectral Models for Wind-Generated Gravity Waves, Rodríguez R. Germán and Q. José Jiménez, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p755-769.

Anomalous Dispersion Paradox in Shallow Water Gravity Waves Shoaling Over Slopping Bottom, S. Yu. Kuznetsov and N. S. Speransky, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael

Hemsley, ed., 1994), p364-373

A Comparison of Three Wave-Measuring Buoys, Anand Gnanadesikan and Eugene A. Terray, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p287-301.

Measured Total Wave Climate of a Small Craft Harbor, Chuck Mesa, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed.,

1994), p90-104.

On the Generation of Infragravity Waves by Shoaling Multidirectional Waves, Okey Nwogu, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p1-14.

Propagation of Linear Gravity Waves Over Slowly Varying Depth and Currents, Francisco J. Rivero and Agustín S.-Arcilla, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p518-532.

The Channel Tunnel: Larger Than Life, and Late, Virginia Fairweather, CE May 94, p42-46.

Beneficial Uses of Dredged Material on the Upper Great Lakes, Douglas J. Zande and M. Pamela Horner, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p654-663

Benefits of Hazard Mitigation Planning to Reduce Shore-line Impacts Due to Great Lakes Water Level Management Fluctuations and Severe Storms, Robert Nairn and Darryl Hatheway, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p182-186.

Climate Warming and Great Lakes Management, Benjamin F. Hobbs, Philip T. Chao, Mohammed Nayal and William T. Bogart, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p295-316.

Conceptualization of Boat Access Development Zones, David G. White, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p605-614.

Coupled Lake Erie Air-Sea, Storm Resolving Forecasts and Predictions, the Viento Project, John G. W. Kelley, Chieh-Cheng J. Yen, Keith W. Bedford, Jay S. Hobgood and David J. Schwab, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p202-215.

Daily Procedure for GLFS Nowcasts, Chieh-Cheng J. Yen, John G. W. Kelley and Keith W. Bedford, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R.

Rumer, ed., 1994), p202-206.

Dredged Material Disposal and Migratory Birds, Les E. Weigum, (Dredging '94, E. Clark McNair, Jr., ed.,

1994), p1380-1387.

An Energy Based Model for Coastal Bays and Lakes, William S. Appleton, William L. Wood and Yan-Sheng Chang, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p565-577

GLFSVIEW - GLFS Product Viewing Application, Yi-Fei P. Chu, Chieh-Cheng J. Yen and Keith W. Bedford, (Hy-draulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p207-211.

The Great Lakes Forecasting System: An Overview, Keith W. Bedford and David J. Schwab, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p197-201.

The Great Lakes Initiative: Dollars Down the Drain, Aleesa L. Bell and Fredric P. Andes, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p110-120.

Hydraulic Engineering '94, 2 vols, ISSN: 1070-1559, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994,

0-7844-0037-7, 1375pp.

- Impact of GOES Data on Surface Heat Flux Predictions, Yi-Fei P. Chu, Keith W. Bedford, Carolyn J. Merry and Jay S. Hobgood, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p212-
- Interactive Models for the Regulation of Lake Ontario, Anthony J. Eberhardt, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),
- Laboratory and Field Demonstrations of Sediment Treat-ment Technologies by the USEPA's Assessment and Remediation of Contaminated Sediments (ARCS) Program, Stephen Garbaciak, Jr., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p567-578.

Lake Michigan Diversion at Chicago, William H. Espey, Jr., Oscar G. Lara and Robert L. Barkau, (Hydraulic En-gineering '94, George V. Cotroneo, ed. and Ralph R.

Rumer, ed., 1994), p175-181.

A Nearshore Model for Cleveland CSO Remediation Design Selection, David P. Podber, Chieh-Cheng J. Yen, Lou Regenmorter, Keith W. Bedford and Onyx W. H. Wai, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p222-226.

Protecting the Great Lakes: Asking the Right Questions, Christopher Grundler, (National Water Resources Regulation: Where is the Environmental Pendulum Now?,

Howard Holme, ed., 1994), p107-109.

The Regulation of Lake Ontario During the Spring of 1993; a Period of Record Supplies, Anthony J. Eberhardt and Peter P. Yee, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p187-191.

Sensitivity of Great Lakes Forecasting System Nowcasts to Meteorological Fields and Model Parameters, William P. O'Connor and David J. Schwab, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p149-157.

Short-Term Forecasts for Lake Erie, John G. W. Kelley, Chieh-Cheng J. Yen, Jay S. Hobgood, David J. Schwab and Keith W. Bedford, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p227-231.

Spectral and Parametric Wave Models of Lake Erie, David J. Welsh and Keith W. Bedford, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p217-221.

Tributary Loading with a Terrain Following Coordinate System, David P. Podber and Keith W. Bedford, (Estuarine and Coastal Modeling III, Malcolm L. Spauldi ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p475-488.

Uncertainty and Time Preference in Shore Protection, Kevin O'Grady and Leonard Shabman, (Risk-Based De-cision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p136-154.

Verification of Lake Superior Outflow Equations, Scott J. Thieme, (Hydraulic Engineering '94, George Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p462-

Green-Ampt model

Approximate Form of Green-Ampt Infiltration Equation, Jeffry J. Stone, Richard H. Hawkins and Edward D. Shirley, IR Jan./Feb. 94, p128-137

Green-Ampt Analysis of Wetting Patterns for Surface Emitters, Shu-Tung Chu, IR Mar./Apr. 94, p414-421.

Greens function

Dynamic Green's Functions of Homogeneous Poroelastic Half-Plane, T. Senjuntichai and R. K. N. D. Rajapakse, EM Nov. 94, p2381-2404.

Grid systems

Bearing Capacity of Rectangular Footings on Geogrid-Reinforced Sand, Temel Yetimoglu, Jonathan T. H. Wu and Ahmet Saglamer, GT Dec. 94, p2083-2099

Buckling Behavior of Square-and-Diagonal Double-Layer Grid, Toshitsugu Saka and Yoshiya Taniguchi, ST Apr. 94, p1088-1102.

Collapse Behavior of Double-Layer Space Truss Grids with Member Buckling, Toshitsugu Saka and Yoshiya Taniguchi, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p529-538.

The Control of Settlement Using Geogrids, Gunther E. Bauer, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and

Guy Y. Félio, ed., 1994), p491-501.

Depth-Averaged Flow Model in Curvilinear Coordinates, Hector R. Bravo, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p517-521.

Explorations in Geodesic Forms, Dimitra Tzourmakliotou, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed.,

1994), p440-449. Geocell Mattress Effects on Embankment Settlements, Mark D. Evans, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p584-597

MAC3D: Multiblock Numerical Model for Hydraulic Applications, Robert S. Bernard, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p507-511.

Nonpoint-Pollution Model Sensitivity to Grid-Cell Size, Baxter E. Vieux and Scott Needham, WR Mar./Apr. 93,

p141-157.

Optimal Design Conception of Grid Domes in Practice, Xue-Ren Hu and Young-Feng Luo, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p430-439.

Research and Application of Various Joints of Space Grid Structures in China, Xi-Liang Liu, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard,

ed. and Celina U. Penalba, ed., 1994), p221-228.

Some Benefits of Grid by Number Sampling, David Crowder and Panayiotis Diplas, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p795-799.

Strip Foundation on Geogrid-Reinforced Clay, E. C. Shin, B. M. Das, V. K. Puri and S. C. Yen, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p538-547.

Structural Integrity of Space Trusses, Erling Murtha-Smith, Anurag Chaturvedi and Shawn F. Leary, (Spatial, Lat-tice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p409-

Grillages

Bridge Diaphragm Elements with Partial Warping Restraint, C. C. Fu and Yao T. Hsu, ST Nov. 94, p3388-

Uplift Load-Displacement Behavior of Grillage Founda-tions, Fred H. Kulhawy and Harry E. Stewart, (Vertical and Horizontal Deformations of Foundations and Em-bankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p233-244.

Grinding

Computer Modelling of Comminuting Granular Media, H. Alehossein and H.-B. Mühlhaus, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p660-667

Focusing on Fatigue, Peter B. Keating, CE Nov. 94, p54-

Groins, structures

3D model verification for a groyne and harbor experiment, P. Mewis and K. -P. Holz, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p905-909.

Coastal Groins and Nearshore Breakwaters, U.S. Army Corps of Engineers, 1994, 0-87262-998-8, 90pp.

Dredged Material Used in Sand-filled Containers for Scour and Erosion Control, Lee E. Harris, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p537-546.

Timber Structures, Daniel F. Tully, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p97-102.

Ground anchors

Design & Construction of the Liberty Street Bridge Earth Support System, David R. Chapman, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p112-129.

Waterproofing a Structural Slab at Ground Anchor Locations, David L. Druss, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p77-92.

Estimating Ground Snow Loads Using Local Climatological Data, Kenneth J. Fridley, Kathy A. Roberts and J. Bryan Mitchell, ST Dec. 94, p3567-3576.

Behavior of Foundations Subjected to Large Ground Movements, Richard M. Bennett, Eric C. Drumm and Guoming Lin, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p49-54.

Conditioned Stochastic Processes for Conditional Random Fields, Hiroyuki Kameda and Hitoshi Morikawa, EM

Apr. 94, p855-875.

Damage Evaluation of Building on Piers in Expansive Clay, Richard J. Finno, Gary J. Klein and Paul J. Sabatini, (Vertical and Horizontal Deformations of Founda-tions and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1482-1493.

Doe's Topical Report on a Methodology to Assess Vibra-tory Ground Motion and Fault Displacement Hazards at the Yucca Mountain Site, David F. Fenster and Richard C. Quittmeyer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2260-2265.

Dual-Level Approach for Seismic Design of Asymmetric-Plan Buildings, Rakesh K. Goel and Anil K. Chopra, ST Jan. 94, p161-179.

Effects of Site Conditions of Earthquake-Resistant Design of Structures, Vitelmo V. Bertero and Eduardo Miranda, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p561-566.

Ground Motions and Air-Blast Effects of Explosive Demolition of Structures, Charles H. Dowding, CO Dec. 94, p838-856.

Ground Movements from Model Tieback Wall Construction, Christopher G. Mueller, James H. Long, Edward J. Cording and David E. Weatherby, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1337-1352.

Ground-Motion and Soil-Response Analyses for Len-inakan, 1988 Armenia Earthquake, M. K. Yegian, V. G. Ghahraman and G. Gazetas, GT Feb. 94, p330-348.

Ground-Motion Spatial Variation Effects on Circular Arch Responses, Hong Hao, EM Nov. 94, p2326-2341. Impediments to the Implementation of Seismic Isolation,

Ronald L. Mayes, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p128-133. Liquefaction of Silty Soils, Y. P. Vaid, (Ground Failures

Under Seismic Conditions, Shamsher Prakash, ed. and

Panos Dakoulas, ed., 1994), p1-16. Numerical Modeling of Initial Ground Movement in an In-

strumented Superconducting Super Collider Shaft, David B. Spires, Fei Duan and Marek Mrugala, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1990-1996.

A Practical Perspective on Liquefaction of Gravels, Julio E. Valera, Michael L. Traubenik, John A. Egan and Jon Y. Kaneshiro, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994),

p241-257.

Prediction of Ground Deformations Due to Excavation-Application to Tunnel Lining Design in Weak Rock, Wern-ping Chen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1997-2005.

Prediction of Structural Response to Large Earthquakes by Using Recordings From Smaller Earthquakes, Erdal Safak, (Structures Congress XII, N. C. Baker, ed. and

Barry J. Loodno, ed., 1994), p1391-1396. Published Attenuation Functions Compared to 6/29/1992 Little Skull Mountain Earthquake Motion, Renner B.

Hofmann and Abou-Bakr K. Ibrahim, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2402-2408. Seismic Parameters from Liquefaction Evidence, James R.

Martin and G. Wayne Clough, GT Aug. 94, p1345-1361. Seismological, Soil and Valley Effects in Kirovakan, 1988 Armenia Earthquake, M. K. Yegian, V. G. Ghahraman and G. Gazetas, GT Feb. 94, p349-365.

Simulation of Multi-Dimensional, Anisotropic Ground Mo-tions, O. Ramadan and M. Novak, EM Aug. 94, p1773-

Strong-Motion Data Processing, A. Gerald Brady and April M. Converse, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1600-1605.

Surface Subsidence Prediction by Nonlinear Finite-

Element Analysis, Yacoub Najjar and Musharraf Zaman, GT Nov. 93, p1790-1804.

Torsional Response of Unsymmetric Buildings to Incoherent Ground Motions, G. D. Hahn and X. Liu, ST Apr. 94, p1158-1181

The Use of Coda Waves for Characterizing the Site Effect on Strong Ground Motion, Keiiti Aki and Byau-Heng Chin, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p579-584.

Vibration Induced Settlement From Blast Densification and Pile Driving, Charles H. Dowding, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994),

p1672-1688.

Ground support equipment
Shaffer, Thomas F. R. Winston Revie and Anita Mandal,
(High Level Radioactive Waste Management, High
Level Radioactive Waste Program Committee, 1994), p696-704.

Thermal and Seismic Impacts on the North Ramp at Yucca Mountain, M. Lin, M. P. Hardy and J. Jung, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1971-1978.

Postonia Water Flooding in the Havana Area, Adrian P. Visocky, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p608-612.

Agroforestry Drainage Management Model: I: Theory and Validation, F. F. Karajeh, K. K. Tanji and I. P. King, IR Mar/Apr. 94, p363-381.

Agroforestry Drainage Management Model: II: Field Water Flow, F. F. Karajeh and K. K. Tanji, IR Mar./Apr. 94, p382-396.

Applications of Optimal Hydraulic Control to Ground-Water Systems, David P. Ahlfeld and Manoutchehr Heidari, WR May/June 94, p350-365. Brackish Groundwater and Urban Runoff: Source of Sup-

ply or Source of Problems? William R. Everest and Richard A. Reynolds, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p770-773.

Confined Aquifer Parameters from a Pump Test Near an Impermeable Boundary, Stephen J. Burges, HY July 93,

p838-845.

Development and Feasibility of a Waste Package Coupled Reactive Transport Model (AREST-CT), David W. Engel, B. Pete McGrail, James A. Fort and Janet S. Roberts, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1214-1221.

Dissolution of TCE and TCA Pools in Saturated Subsurface Systems, Albert E. Pearce, Evangelos A. Voudrias and Michael P. Whelan, EE Sept./Oct. 94, p1191-1206.

Drain-Spacing Calculation Considering Influence of Evap oration, Wang Wenyan, Shen Bing and Li Zhilu, IR

May/June 94, p563-572.

Drawdowns for Leaky-Aquifer Flow with Storage in Finite-Width Sink, Louis H. Motz, IR July/Aug. 94, p820-

The Effect of Fuel Type in Unsaturated Spent Fuel Tests, P. A. Finn, M. Gong, J. K. Bates, J. W. Emery and J. C. Hoh, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1080-1087.

Evaluation of the Pagosa Springs Geothermal Reservoir and Implications of Potential Additional Reservoir Development, Jon Ford and Dennis McGrane, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p376-379.

Fort Bend County Surface Water Supply Study, Martha F. Juch and David E. Winslow, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p214-217. Ground-Water Treatment: Surfactants Surface, ET Aug./

Sept. 94, p10-11.

Groundwater Modelling As a Management Tool, Courtney C. Hemenway, Al Eddebbarh and Paul Grundemann, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p596-599

Herbicide Leaching in a Coastal Plain Soil, W. F. Ritter, R. W. Scarborough and A. E. M. Chirnside, IR May/June

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Improved Interpretation of Hvorslev Tests, Z. Demir and T. N. Narasimhan, HY Apr. 94, p477-494. Instability of Sandbars in Grand Canyon, Muniram Budhu

and Roger Gobin, HY Aug. 94, p919-933. Iron and Sand Marge to Treat TCE-Contaminated Water,

ET June/July 94, p5.

Isotope Systematics in Ground Water and Hydrogenic De-posits at ÄSPÖ, Sweden, Bill Wallin and Zell E. Peterman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2692-2701.

Modeling Municipal Water Demands for a Pump Station Area, Bindu R. Idy, Jerry Rogers, Theodore Cleveland, Lu-Chia Chuang and Kathlie Sheu, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p65-68.

Modeling Regional Flow and Flow to Drains, G. M. Pohll and J. C. Guitjens, IR Sept./Oct. 94, p925-939.

Moisture Migration through Basement Walls, Robert W. Day, CF Feb. 94, p82-86.

Monitoring Water Quality and Use in Colorado, Henriette Emond, Jim C. Loftis, Terence Podmore and Forrest Leaf, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p343-346.

Mulitvariate Geostatistical Design of Ground-Water Moni-Munituariate Geostatistical Design of Ground-Water Moni-toring Networks, Fethi Ben-Jemaa, Miguel A. Mariño and Hugo A. Loaiciga, WR July/Aug. 94, p505-522. Multi-Barrier Borehole Canister Designs for a Tuff Reposi-

tory, David E. James, Robert L. Skaggs and Suneeta Mohansingh, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p650-657.

Nakajima Subsurface Dam, Satoshi Nagata, Kazuki Azuma, Masato Asano, Teruyuki Nishijima, Hideaki Shiiba, David S. Yang and Reika Nakata, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p437-440. Nonlinearity and Free-Surface Flow, Nazeer Ahmed, (Hy-

draulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p327-331. Prediction of Land Subsidence due to Ground-Water Use

in Snow Country, Kazumasa Mizumura, HY Apr. 94,

p448-460.

Radiation Effects from Uranium Ore Bodies, James O. Duguid, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1337-1343.

Risk Management in Wellhead Protection, David A. Chin and Prasad V. K. Chittaluru, WR May/June 94, p294-

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Start-Ups, CE Mar. 94, p8.
Stochastic Fluid Travel Times in Heterogeneous Porous Media, Wade E. Hathhorn and Randall J. Charbeneau,

Media, Water E. Hattinghi and Ramani 3. Chalaterican, HY Feb. 94, p134-146. Sloping Aquifer, Sheik M. H. Yussuff, H. S. Chauhan, Manoj Kumar and V. K. Srivastava, IR Jan/Feb. 94, p97-109.

Treatment of Tetrachloroethylene with Anaerobic Attached Film Process, K. H. Chu and W. J. Jewell, EE Jan./Feb.

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Unsaturated Flow Modeling—Exact Solution to Approximate Problem? Lakshmi N. Reddi and Sampath K. R. Danda, WR Mar./Apr. 94, p186-198.

Water Policy and Management: Solving the Problems in Southern New Jersey, Frank S. Impagliazzo, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p497-500.

Ground-water chemistry
Geoscientific Studies in the Tono Area, Japan, T. Nohara,
T. Tsuboya, M. Yamakawa, H. Sakuma and Y. Yusa,
(High Level Radioactive Waste Management, High
Level Radioactive Waste Program Committee, 1994), p2243-2250.

Ground-water depletion

Spring Deposits and Late Pleistocene Ground-Water Levels in Southern Nevada, Jay Quade, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p2530-2537.

Ground-water flow

Asymmetric Flow into Well by Finite Elements, Kamala K. Singh and Shambhu P. Dasgupta, IR May/June 94, p520-533.

Characterization Study of Fractured Rock, Kenzi Karasaki, Barry Freifeld and Cliff Davison, (High Level Radioactive Waste Management, High Level Radioac-

tive Waste Program Committee, 1994), p2423-2428.
Decision Support System for Conjunctive Use Under Complex Water Right Conditions, Leffrey W. Fredericks, John W. Labadie and Jon Altenhofen, (Water Policy and Management: Solving the Problems, Darrell G. Fontane,

ed. and Harry N. Tuvel, ed., 1994), p582-587. Enhancing Nuclear Waste Disposal Safety by Exploiting Regional Groundwater Flow-An Exploratory Proposition, József Tóth and Grant Sheng, (High Level Radioactive Waste Management, High Level Radioactive Waste

Program Committee, 1994), p1797-1804. Fracture-Matrix Interaction in Topopah Spring Tuff: Experiment and Numerical Analysis, Robert J. Glass, Vince Periment and vanienteal Analysis, Robert J. Glass, vince C. Tidwell, Alan L. Flint, William Peplinski and Yvette Castro, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1905-1914.

Geoscientific Studies in the Tono Area, Japan, T. Nohara, T. Tsuboya, M. Yamakawa, H. Sakuma and Y. Yusa, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2243-2250.

Groundwater Model Simulation of Chemical Transport from a Nearshore Confined Sediment Disposal Facility, Michael Riley, Gopal Biswas, Charles Boatman, Robert Brockhaus, Mark Utting and Doug Hotchkiss, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1517-1526.

Improving Subsurface Characterization and Prediction of nproving Subsurface Characterization and Prediction of Contaminant Transport, Salwa Rashad and Craig H. Benson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p277-

In Situ Treatment of VOCs by Recirculation Technologies, O. F. Webb, R. L. Siegrist, M. R. Ally, W. E. Sanford, P. M. Kearl and J. L. Zutman, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p572-579.

Modeling 3D Ground-Water Flow by Modified Finite-Element Method, Fang Xin Yu and Vijay P. Singh, IR

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Modeling Flow in Variably-Saturated Porous Media, S. P. Shrestha and G. V. Loganathan, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p429-432.

Modeling Heretogeneous Unsaturated Porous Media Flow at Yucca Mountain, Thomas H. Robey, (High Level Ra-dioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2678-2684.

Modeling Regional Flow and Flow to Drains, G. M. Pohll and J. C. Guitjens, IR Sept./Oct. 94, p925-939.

- Nearshore Confined Disposal in a Tidally-Influenced Environment—Design and Operation Experience in Puget Sound, Douglas A. Hotchkiss and Charles D. Boatman, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1260-1269
- An Object-Oriented Approach to PC Finite-Element Solutions, Robert J. Lang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1236-1243.
- A Real-Time Graphical Interface to a Two-Dimensional Groundwater Flow and Mass Transport Model, Robert C. Speake, Jr. and Kay S. Capps, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2081-
- Stochastic Analysis of Ground-Water Flow in Semi-confined Aquifer, Mysore G. Satish and Jianting Zhu, HY Feb. 94, p147-168.
- Stochastic Analysis of Unsaturated Flow and Transport With the Suflat Executive Numerical Code, Amyrossios C. Bagtzoglou, M. Rashidul Islam and Michael Muller, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2669-2677.
- Subsurface Transport Modeling of the Savannah River and Yucca Mountain Sites, Bryan E. Dunlap, Darrell W. Pepper and Dale E. Stephenson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1848-1853.
- U-234/U-238 Ratio: Qualitative Estimate of Groundwater Flow in Rocky Flats Monitoring Wells, J. C. Laul, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2702-

Unsteady Drainage with Variable Drainage Porosity, Rajendra K. Gupta, Ashim K. Bhattacharya and Pitam Chandra, IR July/Aug. 94, p703-715.

Verification of A 1-Dimensional Model for Predicting Shallow Infiltration at Yucca Mountain, Joseph A. Hevesi, Alan L. Flint and Lorraine E. Flint, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2323-2332.

Ground-water management

Applications of Optimal Hydraulic Control to Ground-Water Systems, David P. Ahlfeld and Manoutchehr Heidari, WR May/June 94, p350-365.

- Aquifer Remediation Design: Nonlinear Programming and Genetic Algorithms, Daene C. McKinney, Gregory B. Gages and Min-Der Lin, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p254-257.
- Arizona Groundwater Management Alternatives, James F. Booker, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p351-354.
- Arsenic Removal Via Softening, Laurie McNeill and Marc Edwards, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p640-645
- An Attempt of an Aquifer Model with Lack of Data, Octavio Cabezut-Boo, Ricardo Anza and Luis Tubilla, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p312-316.
- Computerized Building Settlement Analyses for a Contam-inated Groundwater Remediation Project, James A. McKelvey, III, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1228-1235.
- Development of Transport Model for Groundwater Planning and Management in Taipei Basin, Nien-Sheng Hsu, Ming-Jame Horng, Chian Min Wu, William W-G. Yeh and Jan-Tai Kuo, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p332-335
- Evaluation of the Water Supply Potential of the Floridian Aquifer in Seminole County, Florida, Lee P. Wiseman, Robert P. Schreiber, Ricardo Diaz and Charles J. Voss, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p600-603
- Genetic Algorithms in Groundwater Management, L. Srinivasa Reddy, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p293-297.
- Groundwater Development and Related Issues, Abdul Hannan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p308-311.
- Groundwater Management and Systems Operations Optimization Utilizing Supply, Well Reliability, and Demand Distribution as Decision-Making Criteria, Kathlie Supro Jeng and Jerry Rogers, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p77-80.
- Honolulu Project's Soil-mix Cutoff Wall is a U.S. First, CE Jan. 94, p90.
- Partial Infeasibility Method for Chance-Constrained Aquifer Management, Nathan Chan, WR Jan./Feb. 94, p70-
- Ranking Ground-water Management Alternatives by Multicriterion Analysis, Lucien Duckstein, Wiktor Treichel and Samir El Magnouni, WR July/Aug. 94, p546-565.
- Removal of Arsenic by Enhanced Coagulation and Mem-brane Technology, S. David Chang, Hector Ruiz, Wil-liam D. Bellamy, Carl W. Spangenberg and Debra L. Clark, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p632-639.

Simple 'Soda Straw' Sucks Hydrocarbons From Ground Water, ET Aug./Sept. 94, p5.

- Site Characterization by Artificial Neural Networks, Donna M. Rizzo, David E. Dougherty and Theodore P. Lillys, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p250-253.
- Soil Mix Walls in Difficult Ground, David S. Yang and Shigeru Takeshima, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p106-120.
- Water Policy and Management: Solving the Problems, Dar-rell G. Fontane, ed. and Harry N. Tuvel, ed., 1994, 0-7844-0020-2, 900pp.

Ground-water pollution

Assessing Risk of Ground-water Pollution from Land-Disposed Wastes, Kahraman Ünlü, EE Nov./Dec. 94, p1578-1597.

Biodegradation of Phenanthrene in Sand Columns in the Presence of Nonionic Surfactants, David Norris and Tariq Ahmed, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p360-367.

Biotransformation of Pesticides in Simulated Groundwater Columns, Gregory G. Wilber and Stuart R. Garrett, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p368-

375.

Building Groundwater Optimizers That Respond to the Needs of Decision-Makers, David E. Dougherty, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p347-

Computer simulation of pulsed pumping for remediation under mass transfer limited conditions, Z. Jiang and W. P. Ball, Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p352-359.

Computer-Aided Cleanup, Jim Williams and Barney Jones,

CE Oct. 94, p46-49.

A Coupled Mass Transfer and Surface Complexation Model for Uranium (VI) Removal from Wastewaters, John Lenhant, Linda A. Figueroa and Bruce D. Honey-man, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p249-256.

Destruction of Gas Phase TCE Using a Plasma Reactor, Ho-Sik Yoo, John N. Veenstra, Ven-Yen Tsai and Arland H. Johannes, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p585-592.

DOE Waste Gets Big Chill, ET Oct./Nov. 94, p1,7. Estimation of Field Site Flow Parameters, Yahia Majali, Salwa Rashad, John Hoopes and Tswn-Syau Tsay, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p303-307.

Evaluating Sensitivity of Hydraulic Control Optimization Models, David P. Ahlfeld and Jonathan D. Dombek, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

An Evaluation of the Impact of Recent Flooding on the Operation of a Groundwater Extraction and Treatment System at a Superfund Site, Kerry L. Gavett, Michael J. Fiore and Eric J. Meyer, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p764-771.

Fate/Transport Modeling and Remediation of Contaminat-ed Plume at Vance Airforce Base, Avdhesh K. Tyagi and Sharon H. Carpenter, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p287-292.

Genetic Algorithms and Neural Networks: Do Pluralized Techniques Hold Any Advantages for Designing Groundwater Quality Assurance Systems? J. Wayland Eheart, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p258-261.

Ground-Water Treatment: Surfactants Surface, ET Aug./ Sept. 94, p10-11.

Groundwater Remediation at a Superfund Site, Henry Y. He, Jing-Yea Yang and Gregory Powell, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p282-286.

How Many Observation Wells Does it Take to Find a Groundwater Contamination Plume? Bruce R. James and Steven M. Gorelick, (Computing in Civil Engineering,

Khalil Khozeimeh, ed., 1994), p197-199. Improving Subsurface Characterization and Prediction of Contaminant Transport, Salwa Rashad and Craig H. Benson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p277-281.

D. F. Webb, R. L. Siegrist, M. R. Ally, W. E. Sanford, P. M. Kearl and J. L. Zutman, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p572-579. Joint Optimization of Groundwater Remediation and Monitoring, Peter K. Kitanidis and Sang-Il Lee, (Water Poli-cy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p525-528.

Mitigation of Non-Point Source Pollution Impacts on Groundwater Aquifers: A Case Study, Erez Sela, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p246-

Modeling of Chemical Inhibition of Nitrification, Robert W. Okey and H. David Stensel, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p297-304.

Monitoring Petroleum Contamination in an Aquifer, Paramesh Anantharaman and Joseph C. Cataldo, (Hy-draulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p272-276.

Movement of Colloids Under Hydraulic Gradients, Rao S. Govindaraju and Lakshmi N. Reddi, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p322-326.

A New Angle on Ground-Water Remediation, Vernon M. Reid, Kennon W. Wyatt and James A. Horn, CE Apr. 94, p56-58.

Optimization of the Design and Operation of Soil Vapor Extraction Systems, Marshall W. Davert and William W-G. Yeh, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p181-184.

Performance Assessment Model of a Single Waste Package, William J. O'Connell, Tzou-Shin Ueng and Lynn C. Lewis, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1188-1194.

A Physically Based Conceptual Model for Simulating Contaminant Levels in Subsurface Water, Miguel A. Mejia, Mohamed M. Hantush and Miguel A. Mariño, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p355-

Plate and Frame Membrane Air Stripping, Stephen T. Bos-well and David A. Vaccari, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p726-729.

Predictability and Sensitivity of Groundwater Transport Models, Hector R. Fuentes and Vassilios A. Tsihrintzis, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p267-271.

Predicting the Impact from Significant Storm Events on a Hazardous Waste Site, Udai P. Singh, Neal P. Dixon and J. Stephen Mitchell, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p772-780.

Removal Of Chromium From Groundwater Using Permeable Barriers: An Aquifer Simulation Study, Mark D. Schmidt and Stephen P. Shelton, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p792-804.

Simple 'Soda Straw' Sucks Hydrocarbons From Ground Water, ET Aug./Sept. 94, p5.

Subsurface Transport Modeling of the Savannah River and Yucca Mountain Sites, Bryan E. Dunlap, Darrell W. Pepper and Dale E. Stephenson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1848-1853.

Thermally Enhanced Bioremediation of a Gasoline-Contaminated Aquifer Using Toluene Oxidizing Bacteria, Rula Deeb and Lisa Alvarez-Cohen, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p400-407.

Ground-water quality

Analysis of Biomass Distribution and Chemical Interactions in Nitrifying Biofilms, Edna M. C. V. Flora, Joseph R. V. Flora, Makram T. Suidan and Byung J. Kim, (Critical Issues in Water and Wastewater Treatment, Joseph N. Rvan, ed. and Mare Edwards, ed., 1994), p305-312.

Assessing the Reliability of Low Pressure Membrane Sys-tems for Microbial Removal, Samer S. Adham and Jo-seph G. Jacangelo, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p313-319.

Bromide Transport under Sprinkler and Ponded Irrigation, M. Hamdi, D. Durnford and J. Loftis, IR Nov./Dec. 94,

Constructing Around Contamination, Edward A. Wood, Jill R. Crosbie and Richard A. Brown, CE Oct. 94, p50-

Cooperative Ground-Water Resources Management: Local Perspective, Amleto A. Pucci, Jr., WR Nov./Dec. 94, p984-991.

Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994, 0-7844-

0031-8, 825pp.

Destruction of Gas Phase TCE Using a Plasma Reactor, Ho-Sik Yoo, John N. Veenstra, Ven-Yen Tsai and Arland H. Johannes, (Critical Issues in Water and Waste-water Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p585-592.

How Many Observation Wells Does it Take to Find a Groundwater Contamination Plume? Bruce R. James and Steven M. Gorelick, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p197-199.

Minimum-Impact Modeling of Nonpoint-Source Ground-water Pollution, K. Hatfield, N. Samani and R. Noss, IR

Jan./Feb. 94, p149-167.

Nation-Wide Bromide Occurrence and Bromate Formation Potential in Drinking Water Supplies, P. Westerhoff, M. Siddiqui, J. Debroux, W. Zhai, K. Ozekin and G. Amy, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p670-677.

Optimal Control of Ground-Water Quality Management: Nonlinear Programming Approach, S. Alireza Taghavi, Richard E. Howitt and Miguel A. Mariño, WR Nov./

Dec. 94, p962-982

Pilot Test on Groundwater Organics Removal by Low-Pressure Membranes, Paul Fu, Hector Ruiz, Ken Thompson and Carl Spangenberg, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p336-343.

The Relationship of Speciation to Iron and Manganese Removal Strategies, Kenneth Carlson, William Knocke and Kevin Gertig, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p66-73.

Risk Management in Wellhead Protection, David A. Chin and Prasad V. K. Chittaluru, WR May/June 94, p294-

Sensitized Photooxidation of Dissolved Sulfides in Water, T. F. Brewer, J. G. Curtis, E. A. Marchand, V. D. Adams and E. J. Middlebrooks, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p233-240.

Transport Process of Surface Liquid Spills, Hsien-Ter Chou, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p145-149.

Treatment of Tetrachloroethylene with Anaerobic Attached Film Process, K. H. Chu and W. J. Jewell, EE Jan./Feb. 94, p58-71.

Ground-water recharge

Application and Benefits of Aquifer Recharge in Santa Fe, New Mexico, Kevin Bral, Mark Fenton and Mike Slota, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p21-24.

Aquifer Remediation Design: Nonlinear Programming and Genetic Algorithms, Daene C. McKinney, Gregory B. Gages and Min-Der Lin, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and

Harry N. Tuvel, ed., 1994), p254-257.

Aquifer Storage and Recovery at the Centennial Water and Sanitation District, Andrea Aikin, Courtney Hemenway and Paul Grundemann, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p592-595.

Artificial Recharge of Aquifers, Charles L. Joy, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p.376-383. Designing Under Uncertainty When We Can Reduce Uncertainty: When is Another Observation Worth the Cost?

J. Wayland Eheart, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p461-464.

Ground-Water Recharge in Fortymile Wash Near Yucca Mountain, Nevada, 1992-93, Charles S. Savard, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1805-

Groundwater Development and Related Issues, Abdul Han-nan, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p308-311.

Modeling 3-D Ground Water Mounding, Tswn-Syau Tsay, John Hoopes, Salwa Rashad and Yahia Majali, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p317-321. Optimal Groundwater Reclamation with Captial Costs, Teresa B. Culver and Christine A. Shoemaker, (Water

Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p177-180.

Reclaiming Water With Wetlands, Christie Moon Crother, CE July 94, p52-55.

Site Characterization by Artificial Neural Networks, Donna M. Rizzo, David E. Dougherty and Theodore P. Lillys, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p250-253.

Threshold Precipitation Events and Groundwater Re-charge, Richard H. French and Roger L. Jacobson, (Hy-draulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p298-302. Transient Radius of Influence Model, Shu Tung Chu, IR

Sept./Oct. 94, p964-969.

Unsaturated Flow Modeling—Exact Solution to Approximate Problem? Lakshmi N. Reddi and Sampath K. R. Danda, WR Mar./Apr. 94, p186-198.

Weighted Feedback for Groundwater Remediation, C. A. Shoemaker, G. J. Whiffen and J. A. Denu, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p189-192.

Ground-water supply
Comparison of Biological and Chemical/Physical Iron Removal, Charlotte D. Smith and James F. Smith, (Critical Issues in Water and Wastewater Treatment, Joseph N.

Ryan, ed. and Mare Edwards, ed., 1994), p74-81. Computer Simulation Model of the Integrated Local Water Supply Plan for the City of Wichita, Kansas, Jerry Blain, Gene Foster, Jeff Klein and Frank Shorney, (Water Policy and Management: Solving the Problems, Darrell G.

Fontane, ed. and Harry N. Tuvel, ed., 1994), p734-737.

Optimal Operation of Ground-Water Supply Distribution Systems, S. Pezeshk, O. J. Helweg and K. E. Oliver, WR

Sept./Oct. 94, p573-586.

The San Gorgonio Pass Water Project, Richard B. Bell, Aladdin Shaikh and Stephen P. Stockton, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p73-76.

Group communication

Group Dynamics and Construction Project Manager, Pantaleo D. Rwelamila, CO Mar. 94, p3-10.

Compressive Strength of Masonry Prisms, Magdi A. Khalifa and Ahmed E. Magzoub, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1100-

Load Carrying Capacity of SPC Composite Column, Toshiyuki Tanaka, Kazuo Inoue and Cheol-hwan Kim, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p827-832. Structural Capacity of Precast Piles with Grouted Base,

Osamu Kusakabe, Masaaki Kakurai, Katsutoshi Ueno and Yoshinao Kurachi, GT Aug. 94, p1289-1306.

Tests for Flow along Vertically Stratified Porous-Media In-terfaces, Ronald B. Manila, Jr. and J. Jeffrey Peirce, EE May/June 94, p527-542.

Grouting

Grout Repair of Dented Offshore Tubular Bracing Experimental Behavior, James M. Ricles, Troy E. Gillum and William Lamport, ST July 94, p2086-2107.

Practical Seepage Control in Existing Tunnels, J. Samuel Vance, Daniel J. Hurst and C. T. Goewey, (Infrastruc-ture: New Materials and Methods of Repair, Kim D.

Basham, ed., 1994), p888-895

Rehabilitation of Brick-Lined Railroad Tunnels to Achieve Increased Clearance, Bernard H. Voor, III, James Wm. Martin and Willie Benton, III, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p781-787.

Growth stages

Growing Pains for a Maturing Industry, ME Mar./Apr. 94, pl.

Guardrails

Guardrail in Posttensioned Timber-Bridge Specimen, Richard M. Gutkowski, Patrick J. Pellicane and Jean-Francois Kalin, ST Dec. 94, p3435-3455.

Analysis of Missouri River System Operations Alternatives, Roy McAllister, Lawrence Cieslik, Tom Cannon and Lon Hachmeister, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p814-817.

ASCE GUIDE for Design of Guyed Transmission Structures, Alain H. Peyrot, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p613-617.

Assessment: How to Make Lemons into Lemonade, John H. Page, EI Jan. 94, p25-28.

Checklist of Critical Success Factors for Building Projects, M. K. Parfitt and V. E. Sanvido, ME July 93, p243-249.

Design Basis for Creep in Composites Structures, Richard E. Chambers and Ayman S. Mosallam, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p265-271.

Design Guidelines for the Use of Debonded Strands, Bruce W. Russell and Ned H. Burns, (Structures Congress XII. N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p618-

The Development of a Packaging Handbook, L. B. Shap-pert, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1237-1241

Estimating Hydraulic Conductivity of Compacted Clay Liners, Craig H. Benson, Huaming Zhai and Xiaodong Wang, GT Feb. 94, p366-387.

Evaluating Activated Sludge Secondary Clarifier Performance: A Protocol, E. J. Wahlberg, M. Augustus, D. T. Chapman, C. Chen, J. K. Esler, T. M. Keinath, D. S. Parker, R. J. Tekippe and T. E. Wilson, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p209-216.

Framework and Status of the ASCE Parks & Recreation Planning Guide, Marshall Flug, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p187-195.

Guide to Painting Steel Structures to be Published, CE Nov. 94, p21-22.

Interfaces Between Transport and Geologic Disposal Sys-tems for High-Level Radioactive Wastes and Spent Nuclear Fuel—A New International Guidance Document, R. B. Pope, K. W. Han, T. Pollog, L. Baekelandt, D. Blackman, J.-M. Hoorelbeke and J. E. Villagran, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1229-

Japan Builds 21st Century Monuments, Charles R. Heidengren, CE Aug. 94, p57-59.

Kentucky's Experience with CRM-HMA, Kamyar C. Mahboub, Karen A. Sizemore, Robert D. Bosley and Philip A. Creamer, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p432-440.

New Guidelines for Southern Pine Uses in Coastal Marine Construction, Jon Guerry Taylor, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p480-488.

Nuclear Regulatory Commission Staff Approaches to Improving the Integration of Regulatory Guidance Documents and Prelicensing Reviews, Robert L. Johnson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1604-1608.

An Overview of A.S.C.E. Manual 50 "Planning and Design Guidelines for Small Craft Harbors", Fred A. Klancnik, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed.,

1994), p196-200.

305

PCI Plant and Personnel Certification for the Precast Concrete Industry, John S. Dick, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p912-918.

Planning and Design Guidelines for Small Craft Harbors, Revised edition (M&R No. 50), Task Committee on Marinas 2000, American Society of Civil Engineers, (Fred Klancnik, chmn.), 1994, 0-7844-0033-4, 291pp.

Planning and Implementing a Management System for Utility Cuts in City Streets, Rajagopal S. Arudi, Prahlad D. Pant, Andrew Bodocsi and Ahmet E. Aktan, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p764-771.

Recommendations for Standards in Hydraulics, Task Committee on Recommendations for Standards in Hydraulics of the Hydraulics Division of the American Society of Civil Engineers, (George Hecker, chmn.), 1994, 0-87262-971-6, 170pp.

Redefining Public Involvement, Dennis J. Unsworth, ME

July/Aug. 94, p13-15.

Space Policy: Key Points of International Law, Victor Tim-mons and Teresa Laguatan, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p815-819.

Storm Water Pollution Control for Industry: Developing Effective Guidelines Through Public Involvement, L. Donald Duke, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p517-520.

Swiss Guideline: Protection Objectives for the Disposal of Radioactive Waste, Auguste Zurkinden, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1429-1434.

Synopsis of a Manual on Structural Fire Protection, T. T. Lie and E. L. Schaffer, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1002-1005.

Gulf of Mexico

Probability of Severe Hurricanes Across the Gulf of Mexico, L. E. Chouinard and Chang Liu, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p696-705.

Gully Potential in Soil-Covered Uranium Waste Impoundments, Steven R. Abt, Christopher J. Pauley, Scott A. Hogan and Terry L. Johnson, EY Aug. 94, p51-66.

Gusset plates

Elastic Buckling Strength of Gusset Plate Connections, J. J. Roger Cheng, Michael C. H. Yam and S. Z. Hu, ST Feb. 94, p538-559.

Seismic Rehab Continues on Steel-Framed Buildings, CE Oct. 94, p12,14.

Gust Speeds in Hurricanes, R. D. Marshall, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1457-1462.

ASCE GUIDE for Design of Guyed Transmission Structures, Alain H. Peyrot, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p613-617.

Tallest Guyed Tower? Guess Again (ltr), CE Sept. 94, p30. Tallest Guved Tower? Two are Taller (ltr), CE June 94,

TV Tower Designed for Winds Up to 145 mph, CE Apr. 94, p107.

Gypsum

Behavior of Gypsum-Sheathed Cold-Formed Steel Wall Studs, Thomas H. Miller and Teoman Pekoz, ST May 94, p1644-1650.

Gypsum Plant Registers Under ISO, CE Dec. 94, p8

Resilient Modulus Test Protocol for Cement Stabilized Phosphogypsum, Michael I. Pericleous and John B. Metcalf, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p491-498.

Seismic Damage-Control Design of Gypsum-Roof Diaphragms, Sashi K. Kunnath, Mehrdad Mehrain and

William E. Gates, ST Jan. 94, p120-138.

The Use of By-Product Gypsum in Road Construction: a State-of-the-Art Summary, Ramzi Taha, Tom Papagian-nakis, Roger Seals and Donald Saylak, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p170-177.

Half space

Stresses Induced by Surficial and Deep Loading in Elastic Medium, Olivier Rossa and Gabriel Auvinet, GT Aug. 92, p1241-1246.

Halides

Treatment of Drinking Water Containing Bromate and Bromide Ions, Taha F. Marhaba and Steven J. Medlar, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p476-

Trihalomethanes in Chlorinated Sacramento-San Joaquin Delta Drinking Water Simulated with the EPA WTP-THM Model, Russ T. Brown, Doug Brewer, Doug Owen and Zaid Chowdhury, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p492-500

Halogen organic compounds

Alternative Disinfectants for Drinking Water Treatment, Benjamin W. Lykins, Jr., Wayne E. Koffskey and Kathleen S. Patterson, EE July/Aug. 94, p745-758.

The Evaluation of Empty Bed Contact Time on the Bio-degradation of Pentachlorophenol using an Anaerobic GAC Fluidized Bed, Gregory J. Wilson, Julie A. Wagner, Amid P. Khodadoust, Makram T. Suidan and Richard C. Brenner, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p624-631.

Investigations of Potential Radical Interaction in the For-mation of Brominated Organic Compounds in Water, Rengao Song, Adam Eyring and Roger Minear, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p467-475

Treatment of Drinking Water Containing Bromate and Bromide Ions, Taha F. Marhaba and Steven J. Medlar, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p476-

Handicapped passengers

Dwell-Time Effects of Low-Floor Bus Design, Jonathan C. Levine and Gwo-Wei Torng, TE Nov./Dec. 94, p914-929

Handicapped persons

Americans with Disabilities Act and Employment Practices in Construction, Stuart D. Anderson, Carolyn F. Morgan and Mukul Goel, EI Oct. 94, p360-378.

EEO, ADA and Hiring, Mark Disney, ME May/June 94, p18-21.

Hangars

California Blimp Hangars, Framed in Wood, Are Landmarks, CE Oct. 94, p70.

Helium-Supported Hangar for a Small Solar-Powered Airship, Rosemarie Wagner and Bernd Kröplin, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p592-601.

Hangers

Reliability of Light-Gage Metal Joist Hangers, Francis O. Berkoh and Juan J. Salinas, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p906Harbor engineering

306

Dredging in the Bering Sea St. George Island 1993-94 Harbor Dredging Project, William J. Gerken and Jeffrey F. Gilman, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1426-1435.

Harbor facilities

Concept for a Mixed Use Recreational Harbor on Lake Superior, Kenneth M. Cobb and Dorian Grilley, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p104-113.

Harbor and Marina Improvements McKinley Marina Mil-waukee, Wisconsin, Greg High and Dave Werren, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p489-498.

Harbor structures

King Harbor Mole Repair Redondo Beach, California, Clark B. Adams, (Marinas, Parks and Recreation Devel-opments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p283-291.

Planning and Design Guidelines for Small Craft Harbors, Revised edition (M&R No. 50), Task Committee on Marinas 2000, American Society of Civil Engineers, (Fred Klancnik, chmn.), 1994, 0-7844-0033-4, 291pp.

Harbors

3D model verification for a groyne and harbor experiment, P. Mewis and K. -P. Holz, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p905-909.

Agitation Dredging Environmental Study, Larry M. Stuber and Elizabeth A. Day, (*Dredging '94*, E. Clark McNair,

Jr., ed., 1994), p76-85.

Analysis of Prototype Long Period Waves for Los Angeles/Long Beach Harbor Resonance Studies, William C. Seabergh, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p15-27

ASA.WAVES: An Interactive PC-based Wave Forecasting Tool, Stéphan T. Grilli, T. Opishinski, M. L. Spaulding and T. Isaji, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p890-904.

Control of Odor and VOC Emissions at Wastewater Treatment Plants -Boston Harbor Case Study-, Robert Getter, Cheryl Breen and Mark Laquidara, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p548-555.

Development of the Sheboygan Waterfront Sheboygan, Wisconsin, Robert Doyle, Fred A. Klancnik and Robert Petersen, (Marinas, Parks and Recreation Develop-ments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p552-561.

Measured Total Wave Climate of a Small Craft Harbor, Chuck Mesa, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p90-104

Measurement and Analysis of Wave Data in Los Angeles-Long Beach Harbors, James Rosati, III and Paul T. Puckette, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p223-235

Numerical Modeling of Waves in Harbors, Edward F. Thompson, H. S. Chen and Lori L. Hadley, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p590-601.

An Overview of A.S.C.E. Manual 50 "Planning and Design Guidelines for Small Craft Harbors", Fred A. Klancnik, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p196-200.

Planning and Design Guidelines for Small Craft Harbors, Revised edition (M&R No. 50), Task Committee on Marinas 2000, American Society of Civil Engineers, (Fred Klancnik, chmn.), 1994, 0-7844-0033-4, 291pp.

State of the Harbor May Be Improving, CE Nov. 94, p8. Wave-Induced Oscillation in Harbor with Porous Break-waters, Xiping Yu and Allen T. Chwang, WW Mar./Apr. 94, p125-144.

Hardness

Constitutive Theory of Interface Behavior in Quasi-Brittle Materials, H. Y. Yang and Ming L. Wang, EM Dec. 94,

DBP and Hardness Control by Membrane Filtration, Charles D. Turner and Srinivasa R. Kadubandi, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p344-351.

Heterogeneous Hardening Plasticity Model for Concrete, H. C. Chan, Y. K. Cheung and Y. P. Huang, ST Jan. 94, p46-62.

New Kinematic Hardening Model, Wei Jiang, EM Oct. 94, p2201-2222.

Erosion Hazards and Coastal Construction Deficiencies Observed on Kauai After Hurricane Iniki, A. Todd Davison, Charles E. Bornman and Melvin Nishihara, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p736-745.

The Human Impact of Hurricane Iniki, James K. Mitchell, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad So-

tani, ed., 1994), p259-267.

Hurricane Iniki and Typhoon Omar Meteorology, Thomas A. Schroeder, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed.

and Mehrdad Sotani, ed., 1994), p84-91.

Hurricane Iniki Effects on Coral Sand and Beach Processes on Kauai, Hans-Jürgen Krock and Doug Neill, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p782-790.

Improvements to Residential Construction on Kauai After Iniki, Ken K. Hayashida and Dennis K. Hanatani, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani,

ed., 1994), p617-625.

An Overview of the Federal Response to Hurricane Iniki, Frank R. Finch, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p294-299.

Performance of Plywood and OSB Sheathing During Hurricanes Andrew and Iniki, Edward L. Keith, (Hurricanes of 1992: Lessons Learned and Implications for the Fu-ture, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p313-329.

The Role of SEAOH in the Post-Iniki Rebuilding and Recovery Effort, Howard K. C. Lau and Michael K. H. Yee, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p278-283.

A Survey of Building Performance in Hurricane Iniki and Typhoon Omar, James W. Sheffield, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p446-455

Terrestrial Analogs: Implications for Lunar Lava Tubes, Cassandra R. Coombs and B. Ray Hawke, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1138-1145

Hazardous materials

Bridge System Breaks New Ground as Storage Vault, CE July 94, p13-14

Concept for Hazardous Material Management and Container Closure Using Copper Based Alloys, Holt Murray, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1000-1007.

Concrete Watertight Structures and Hazardous Liquid Containment, Robert Hengst, 1994, 0-87262-791-8,

Debris Removal Operations Following Hurricane Andrew, Rex M. Holmlin, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p539-547.

Highway and Interline Transportation Routing Models, David S. Joy and Paul E. Johnson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1263-1269. Is There Engineer Liability Under Superfund?, CE Mar.

94, p38.

Lunar Base Aspects for Biotechnology Industry, Judith Fielder and Nickolaus Leggett, (Engineering, Construc-tion, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1230-1236.

A Mobile Robot for Reconnaissance of HAZMAT Incident Sites, Richard V. Welch, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer,

ed., 1994), p269-277.

An Overview of the Accident Response Mobile Manipulation System (ARMMS), W. D. Morse, D. R. Hayward, D. P. Jones and A. Sanchez, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer,

ed., 1994), p304-310.

Raising Students' and Educators' Awareness of Radioactive Materials Transport Through Creative Classroom
Materials and Exhibits, Judith Holm, Cheryl Sandoz, Jennifer Dickenson, Anne Marie Smith and Jan Cor-telyou Lee, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p213-216.

Volatilization of Selected Organic Compounds from Quiescent Water, Jian Peng, Jatinder K. Bewtra and Nihar Biswas, EE May/June 94, p662-669.

Advanced Concepts in Cement Solidification and Stabilizaavance Concept in Cement Softantication and Stabiliza-tion Technology, D. L. Cocke, M. Y. A. Mollah, T. R. Hess and R. K. Vempati, (Advances in Cement and Con-crete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p614-615.

Automation Concepts for In-Situ Waste Containment, Larry Banta and David Martinelli, (Robotics for Challeng

ing Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p448-456.
Benzene Transport Through Landfill Liners Containing Organophilic Bentonite, James A. Smith and Peter R. Jaffé, EE Nov./Dec. 94, p1559-1577.

Characterization and Use of Fluidized-Bed-Combustion Coal Ash, Christina B. Behr-Andres and Neil J. Hutzler, EE Nov./Dec. 94, p1488-1506. Cleaning Up Toxic Wastes With Baking Soda, CE Sept.

94, p19.

Clinton Administration Outlines Superfund Plans, CE Feb. 94, p17-18.

Decision-Making Paradigm for Risk Assessment of Haz-ardous Wastes Using Fuzzy Sets, Timothy Ross, Joseph Trumm and Sunil Donald, (Computing in Civil Engi-

neering, Khalil Khozeimeh, ed., 1994), p200-207. Effects of Policy and Other Changes on Transuranic Waste Disposal at WIPP, Robert H. Neill and Lokesh Chaturvedi, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p280-284.

Feasibility Analysis of Automated Material Handling for Hazardous Waste Remediation, Andrew F. Griffith, Carl T. Haas and Richard L. Tucker, (Robotics for Challeng ing Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p338-346.

Hazwaste Spending Boom to Continue, CE Feb. 94, p8. Houdini: In-Tank Mobile Cleanup Robot, Hagen Schempf, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p286-295.

Household Hazardous Wastes-Discard Patterns and Management Options, Chris Zeiss, UP June 94, p87-103. Identifying Promising Pollution-Prevention Technologies, James D. Englehardt, EE May/June 94, p513-526.

In-Situ Treatment of Hazardous Sediment, Lyman Wible, Stacy McAnulty, Robert Stanforth, Ajit Chowdhury and Mick Warner, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p468-473.

Leaching from Cementitious Waste forms in Belowground Vaults, John C. Walton, EE Nov. Dec. 94, p1507-1523.

Optimal Land Allocation for Solid- and Hazardous-Waste Landfill Siting, S. Diane Minor and Timothy L. Jacobs, EE Sept./Oct. 94, p1095-1108. An Overview of the Accident Response Mobile Manipulation System (ARMMS), W. D. Morse, D. R. Hayward, D. P. Jones and A. Sanchez, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p304-310.

The Present State-of-the-Art of Immobilization of Hazardous Heavy Metals in Cement-Based Materials, David Bonen and Shondeep L. Sarkar, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p481-498.

Quality Assurance for Hazardous-Waste Projects, N. S. Shashidhara, CE Dec. 94, p66-68.

Quest for the Perfect Cap, N. Richard Wing and Glendon W. Gee, CE Oct. 94, p38-41.

Remote Infrared System for Scanning Hazardous Waste Tanks, Kim L. H. Morris, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1104-1109.

Risk-Based Management of Uncertainty During Project Planning and Execution, Angel L. Rivera and Juan J. Ferrada, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p384-389.

Robotics and Automation for Environmental Screening and Characterization, Kelly R. Tilford, Edward W. Jaselskis, Marvin S. Anderson and Ralph E. Patterson, III, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p329-337.

Simultaneous Routing and Siting for Hazardous-Waste Operations, Timothy L. Jacobs and John M. Warmerdam, UP Sept. 94, p115-131.

Spoils of War, Richard S. Skryness, Karl Swenson and Williams Pananos, CE Nov. 94, p51-53.

Superfund Decision Analysis in Presence of Uncertainty Aaron A. Jennings, Neel Mehta and Sumeet Mohan, EE Sept./Oct. 94, p1132-1150.

Technical Area 5 - Dredging Research Program, Thomas W. Richardson, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1-10.

Waste Generation and Minimization in Semiconductor In-dustry, David G. Gilles and Raymond C. Loehr, EE Jan./Feb. 94, p72-86.

Hazardous waste sites

Application of a Geographic Information System to Evaluate Environmental Hazards, Mary J. S. Roth, Deborah L. Shaffer and Roger Ruggles, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p265-272. Computer-Aided Cleanup, Jim Williams and Barney Jones,

CE Oct. 94, p46-49.

Generic Data Acquisition System for Robotic Waste Char-acterization, John T. Feddema and Barry L. Spletzer, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p320-328.

Negotiating Equity for Management of DOE Wastes, Sam A. Carnes, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1-8.

A New Angle on Ground-Water Remediation, Vernon M. Reid, Kennon W. Wyatt and James A. Horn, CE Apr. 94,

Predicting the Impact from Significant Storm Events on a Hazardous Waste Site, Udai P. Singh, Neal P. Dixon and J. Stephen Mitchell, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Ed-wards, ed., 1994), p772-780.

Quality Assurance for Hazardous-Waste Projects, N. S. Shashidhara, CE Dec. 94, p66-68.

Robotic Opportunities for Hazardous-Waste Cleanup, Edward J. Jaselskis and Mary Rose Anderson, EE Mar./ Apr. 94, p359-378.

Robotics for Challenging Environments, Laura A. Dem-setz, ed. and Paul R. Klarer, ed., 1994, 0-87262-913-9,

Simultaneous Routing and Siting for Hazardous-Waste Operations, Timothy L. Jacobs and John M. Warmerdam, UP Sept. 94, p115-131.

Toward Integrated Design of Waste Management Technologies, Sam A. Carnes and Amy K. Wolfe, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p267-274.

Voluntary vs. Directed Siting - Or Somewhere In-Between? Elizabeth Peelle, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p201-212.

308

Benefits of Hazard Mitigation Planning to Reduce Shore-line Impacts Due to Great Lakes Water Level Management Fluctuations and Severe Storms, Robert Nairn and Darryl Hatheway, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p182-186.

Development of an Expert System to Identify Hazardous Highway Spots, Joseph E. Hummer and Paul R. Sloup, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p333-340.

Erosion Hazards and Coastal Construction Deficiencies Observed on Kauai After Hurricane Iniki, A. Todd Davison, Charles E. Bornman and Melvin Nishihara, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p736-745.

A Feature Based Path Planning System for Robotic Stencil-ing of Roadway Markings, H. Kochekali and B. Ravani, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p52-60.

One Engineer's Wish List for Hurricane Hazard Mitigation, Ronald F. Zollo, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p268-277.

A Performance Goal-Based Seismic Design Philosophy for Waste Repository Facilities, Quazi A. Hossain, (High Level Radioactive Waste Management, High Level Ra-dioactive Waste Program Committee, 1994), p2266-

2271.

Staff Technical Position on Consideration of Fault Displacement Hazards in Geologic Repository Design, Keith I. McConnell and Michael P. Lee, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2257-2259.

Steep Constructed Stream Channels and Chutes, Kenneth R. Wright, F. Robert McGregor and Gary Lacy, (Hy-

draulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p657-661.

Yucca Mountain: A Potential Trade-Off in Radiological Hazards, P. Spiegler, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1959-1963.

Head gates

Effects of Lateral Heading Flow Steadiness on Lateral Spillage, Eduardo A. Latimer, Michael R. Petersen and Andrew A. Kelle: (Water Policy and Management: Solving the Problems Derrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994, p115-118.

Head loss

Analysis and Design of Sprinkler Irrigation Laterals, Helmi M. Hathoot, Hussein M. Abo-Ghobar, Ahmed I. Al-Amoud and Fawzi S. Mohammad, IR May/June 94,

Design of Open-Channel-Contraction Transitions, Prabhata K. Swamee and Bharat C. Basak, IR May/June 94, p660-668.

Energy Loss at Combining Pipe Junction, Marc Serre, A. Jacob Odgaard and Rex A. Elder, HY July 94, p808-

Headloss Analysis for Modern Piping Systems, L. Gregg Horn, (*Hydraulics of Pipelines*, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p10-27.

Hydraulics of Center-Pivot Laterals, Edmar J. Scaloppi and Richard G. Allen, IR May/June 93, p554-567.

Hydraulics of Stationary Capsule in Pipe, Henry Liu and James L. Richards, HY Jan. 94, p22-40.

Prediction of Deep-Bed-Filter Performance Using Recursive Algorithms, C. S. P. Ojha and N. J. D. Graham, EE July/Aug. 94, p961-971.

Specification Contract Effects on Hydraulic Designs, Jeff Baysinger and Leo Kinney, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p152-158.

Head, fluid mechanics

Comparison of Headcut Advance Testing and Soil Test Re-Companison of reaacut Advance Testing and Soil Test Results, Gregory J. Hanson and Robinson. Kerry M., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p426-430.
Unsteady Drainage with Variable Drainage Porosity, Rajendra K. Gupta, Ashim K. Bhattacharya and Pitam Chandra, IR July/Aug. 94, p703-715.

An Improved Design of Fishways Under High Variation of Headwater, Kuo-Cheng Hsieh, Sue-Jen Wu and Che-Yuan Huang, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p457-

Health hazards

Assessing the Reliability of Low Pressure Membrane Systems for Microbial Removal, Samer S. Adham and Joseph G. Jacangelo, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p313-319.

Watts, ed., 1937, 1937-195.

Clearing the Air About Sludge Incinerator Emissions, Phillip M. Martin, Eugene W. Waltz and Richard D. Kuchenrither, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p122-128.

Combatting 'Sick Building Syndrome', CE Jan. 94, p20-

Computer-Assisted Coal Mining - An Overview, George H. Schnakenberg, Jr., (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p427-436.

Contribution of Waterborne Radon to Home Air Quality, Arun K. Deb, (Critical Issues in Water and Wastewater

Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p662-669.

Destruction of Gas Phase TCE Using a Plasma Reactor, Ho-Sik Yoo, John N. Veenstra, Ven-Yen Tsai and Arland H. Johannes, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p585-592.

Does Current Cancer "Risk Assessment" Harm Health? Bruce N. Ames, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard

Holme, ed., 1994), p121-122.

Emissions, Ambient Concentrations, and Potential Health Hazards of VOCs from Wastewater Treatment, Jin-Sheng Lin and Lynn M. Hildemann, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p580-584

Environmental Effects of Flooding at a USCG Base, Virginia L. Bretzke and Michael J. Donnelly, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p781-787.

A Gap in the Surface Water Treatment Rule: The Watersheds, Daniel A. Okun, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p501-507.

A Health Risk Based Approach for HLW Repository Envi-ronmental Protection Criteria, R. F. Williams, R. L. Yang, R. McGuire and R. E. Wilems, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1435-1450.

Nuclear Propulsion: Safety Measures and Concerns, Lindsay N. Herron, (Engineering, Construction, and Opera-tions in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p747-750.

Predicting Paint's Service Life, ET Aug./Sept. 94, p10. Radiation Effects from Uranium Ore Bodies, James O. Duguid, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1337-1343.

Reducing the Long-Term Effects of Zero-Gravity, Jeremi-ah Rogers and Sarah Coleman, (Engineering, Construc-tion, and Operations in Space IV, Rodney G. Galloway,

ed. and Stanley Lokaj, ed., 1994), p833-836. Risk Management Strategies for Natural, Manmade, and Technological Hazards, Steven R. Cone, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p342-344.

Structured Tradeoffs Preference Elicitation: Evaluating CRWMS Design and Operations, Hollister Hartman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p619-626

The Effect of Zero Gravity on Bones", Elizabeth Cassell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed.,

1994), p853-856.

Health regulations
Firms Tackle Health-Care Costs, ME May/June 94, p3.

Heat exchangers

Stream Water-Temperature Sensitivity to Weather and Bed Parameters, Bashar A. Sinokrot and Heinz G. Stefan, HY June 94, p722-736.

Impact of GOES Data on Surface Heat Flux Predictions, Yi-Fei P. Chu, Keith W. Bedford, Carolyn J. Merry and Jay S. Hobgood, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p212-216.

Heat loss

Studies of Non-Isothermal Flow in Saturated And Partially Saturated Porous Media, Clifford K. Ho, Kevin S. Maki and Robert J. Glass, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2481-2491.

Heat transfer

Engineered Barrier Environment, Yucca Mountain, Dale G. Wilder, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1179-1187.

Experimental Heat Transfer and Fluid Flow Over Drift-Emplaced Canisters, William G. Culbreth and Satish Pattisam, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p772-779.

Heat Transfer Effects in Vertically Emplaced High Level Nuclear Waste Container, Samir F. Moujaes and Yao M. Lei, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

Heat Transfer Modeling in Burial Sites Containing Heat-Generating Waste, Mohamed Alsharif, Iqbal Ahmed and Paul Dickman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Commit-

tee, 1994), p899-906.

Implication of Waste Package Heat Output Distributions Resulting From Waste Stream Variability, John F. King, Carol J. Rhodes and Steven F. Saterlie, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p868-876.

Moisture and Heat Flow in Concrete Walls Exposed to Fire, Jana Selih, Antonio C. M. Sousa and Theodore W.

Bremner, EM Oct. 94, p2028-2043.

A Numerical Study of Convection Heat Transfer Within Enclosed Horizontal Rod-Bundles, M. Keyhani and L. Luo, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p780-787

An Object-Oriented Approach to PC Finite-Element Solutions, Robert J. Lang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1236-1243.

Pressure-Driven Gas Flow in Heated, Partially-Saturated Porous Media, Franklin T. Dodge and Ronald T. Green, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2217-2227.

Simulation of Heat Transfer Around a Canister Placed Horizontally in a Drift, Samir Moujaes and Akshay Bharga-va, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p801-808.

Thermosyphon Analysis of a Repository: A Simplified Model for Vapor Flow and Heat Transfer, Randall D. Manteufel and Mark W. Powell, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2207-2216.

Unsaturated Flow Experiment with Phase Change-The Heat Pipe Effect, A. Izzeldin, E. Hanson and R. Boehm, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2475-2480.

Heat treatment

Effect of Heat Treatment on Strength of Clays, R. C. Joshi, Gopal Achari, D. Horsfield and T. S. Nagaraj, GT June

Heat-Straightening Repair of Damaged Steel, R. Richard Avent, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1194-1202. Reducing Wastewater Sludge Pathogens Using Heat Treat-ment, Mark Kennedy, Kondapalli Reddy and Lyle John-

son, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p281-288.

Strength of New Heat Treated Window Glass Lites and Laminated Glass Units, H. Scott Norville, Paul M. Bove, Darrel L. Sheridan and Stacey L. Lawrence, ST Mar. 93,

Heated water discharge

Stratified Cooling Channel for Thermal Discharges, R. E. Baddour, EE Jan./Feb. 94, p242-253.

The Challenge of Mining He-3 on the Lunar Surface: How All the Parts Fit Together, Igor N. Sviatoslavsky, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994),

Computer Based Energy Analysis for Mechanical Retrofit of Buildings, Joseph Staib, Matt Syal and David Peters, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p1349-1356.

Energy Analysis of High Temperature Lunar Manufactur-ing Processes, Belinda Wong-Swanson and Rocco Fazzolari, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p697-707

Hydro Plant Research Data Acquisition System, James E. Donegan, Julia Crittenden Tarbell and John F. Doyle, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p477-481.

In-situ Extraction of Lunar Soil Volatiles, Layton J. Wittenberg, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p687-696.

ed., 1994), pob. 1998. Induction Heating for Rehabilitation of Steel Structures Using Composites, Pierre E. Bourban, Erdal Karamuk, Roderic C. Don and John W. Gillespie, Jr., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p287-294.

The Influence of Kiln Atmosphere on Clinker Characteristics, F. P. Sorrentino, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar,

ed., 1994), p65-78.

Thermal Conductivity of Earth Blocks, Joe O. Akin-musuru, MT Aug. 94, p341-351.

Thermal Regeneration of Spent Lithium Hydroxide, Ven-katesh Srinivasan and Bernadette Luna, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1036-

Yucca Mountain: A Potential Trade-Off in Radiological Hazards, P. Spiegler, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1959-1963.

Estimating Basal-Heave Stability for Braced Excavations in Soft Clay, A. T. C. Goh, GT Aug. 94, p1430-1436.

Performance of Slab-on-Grade Foundations on Expansive Soil, Robert W. Day, CF May 94, p129-138.

Potential for Seepage Erosion of Landslide Dam, William Meyer, R. L. Schuster and M. A. Sabol, GT July 94, p1211-1229.

Prediction of Movement in Expansive Clays, Robert L. Lytton, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1827-1845. Heavy metals

Bioleaching of Metals from Sewage Sludge: Elemental Bioleaching of Metals from Sewage Studge: Elemental Sulfur Recovery, B. R. Ravishankar, J. F. Blais, H. Ben-moussa and R. D. Tyagi, EE Mar./Apr. 94, 9462-470. Biological Reduction of Chromium by E. COLI, Hai Shen

and Yi-Tin Wang, EE May/June 94, p560-572.

and 11-11n wang, Ele MayJune 94, p.500-372.

Biological Removal of Heavy Metals by Sulfate Reduction
Using a Submerged Packed Tower, George Neserke,
Linda Figueroa and Nevis Cook, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p257-264.

Chelating Composite Membrane: Its Application in Selective Heavy-Metal Solid-Phase Separation, Sukalyan Sengupta and Arup K. Sengupta, (Critical Issues in

Sengupta and Arup N. Sengupta, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p.265-272.

Costs and Benefits of Meeting the San Francisco Bay Copular Treatment Please osts and Benefits of Meeting the Sair Francisco Bay Copper Objective by Regulating Small Treatment Plants, Steven X. McHaney, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1232-1236.

Delineating Limits of Remediation for Heavy Metal Contaminated Sediments in River and Cove Areas, Gregory P. Matthews and Thomas M. Simmons, (Dredging E. Clark McNair, Jr., ed., 1994), p1240-1249.

Development of an Excavation Plan for Heavy Metal Contaminated Marsh Deposits, John J. Nocera and Thomas M. Simmons, (Dredging '94, E. Clark McNair, Jr., ed.,

M. Simmons, Opredging '94, E. Clark McNair, Jr., ed., 1994), p1220-1229.
Heavy Metal Removal from Soil by Coupled Electric-Hydraulic Gradient, Lutful I. Khan and M. Sahidul Alam, EE Nov/Dec. 94, p1524-1543.
Heavy Metal Removal Using Peat/Wetland Treatment, Suzanne Murawski, Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p408-414.

Immobilization of Heavy Metals in Cementitious Matrix, J. Tritthart, F. D. Tamas, M. Patkai-Horvath and E. Zinterl, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p614.

Modeling Heavy Metal (Cadmium) Uptake by Soil-Plant Root System, Sandhya Rao and Shashi Mathur, IR Jan./ Feb. 94, p89-96.

Molten Metal Bath Cleans Up Toxics, CE Jan. 94, p21-22.
Pilot-Scale Demonstration of Sediment Washing, Jim E.
Galloway and Frank L. Snitz, (*Dredging '94*, E. Clark

McNair, Jr., ed., 1994), p981-990.

Preparation of Bid Documents for Dredging/Excavating Contaminated Sediments, Soils and Marsh Deposits at the Marathon Battery Superfund Site Cold Spring, NY, Thomas M. Simmons, Gregory P. Matthews and Nick Multari, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1201-1209.

The Present State-of-the-Art of Immobilization of Hazardous Heavy Metals in Cement-Based Materials, David Bonen and Shondeep L. Sarkar, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep

L. Sarkar, ed., 1994), p481-498.

Properties of High Fly Ash Content Cellular Concrete, Ronald D. Neufeld, Luis E. Vallejo, Wenyi Hu, Martin Latona, Christopher Carson and Christopher Kelly, EY Apr. 94, p35-48

Treatment of Metal Industrial Wastewater by Fly Ash and Cement Fixation, C. H. Weng and C. P. Huang, EE Nov./Dec. 94, p1470-1487.

Use of Granular Activated Carbon Columns for Lead Removal, B. E. Reed and S. Arunachalam, EE Mar./Apr. 94, p416-436.

Diaphragm Height of Ejector of Uniform Sediment, Nandana Vittal and G. A. Shivcharan Rao, HY Mar. 94, p398-405.

Drop Height Influence on Outlet Scour, Frederick K. Doehring and Steven R. Abt, HY Dec. 94, p1470-1476.

Dwell-Time Effects of Low-Floor Bus Design, Jonathan C. Levine and Gwo-Wei Torng, TE Nov./Dec. 94, p914-

Heney, Joseph E. ASCE Elevates 13 of Its Own to Honorary Membership, NE May 94, p3.

Atlanta Ceremony Celebrates 13 New Honorary Members of ASCE, NE Dec. 94, p2-3.

Herbicides

Herbicide Leaching in a Coastal Plain Soil, W. F. Ritter, R. W. Scarborough and A. E. M. Chirnside, IR May/June

Heuristics

Heuristic Algorithm to Locate Solid-Waste Disposal Site, Narayanaswamy V. Ramu and William J. Kennedy, UP Mar. 94, p14-21.

Heuristic Algorithms for Aggregating Rail-Surface-Defect Data, Roemer M. Alfelor and Sue McNeil, TE Mar./Apr.

94, p295-311.

Heuristic Knowledge-base Approach to Runoff Estimation in Midwestern States Using a SCS Curve Number Method, Jaewan Yoon and G. Padmanabhan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p410-417.

Interactive Design of Service Routes, Jin-Yuan Wang and Jeff R. Wright, TE Nov./Dec. 94, p897-913.

High occupancy vehicles

Commercial Vehicle Operations and Automatic Vehicle Identification Applications at Airports, M. Allen Hoffman and Emily Van Wagner, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p162-173.

Passenger-Free and Proud of It, CE Oct. 94, p8.

High strength concretes

Behavior of Reinforced High-Strength-Concrete Corbels, Yook-Kong Yong and P. Balaguru, ST Apr. 94, p1182-

Controlled Dynamic Cracking of High-Strength Concrete Specimens, David Z. Yankelevsky and Itzhak Avnon, MT Nov. 94, p564-577

Fiber-Optic Bragg Grating Sensor for Nondestructive Evaluation of Composite Beams, Benxian Chen, M. H. Maher and Edward G. Nawy, ST Dec. 94, p3456-3470.

High Strength Shotcrete and Concrete on the SSC Project, Leon A. Berdugo, Prabir Das and C. J. Roth, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p761-766.

High-Performance Concrete Incorporating Large Volumes of ASTM Class F Fly Ash, A. Bilodeau and V. M. Malhotra, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994),

High-Strength Concrete Columns Confined by Rectangular Ties, Daniel Cusson and Patrick Paultre, ST Mar. 94,

p783-804

High-Strength Concrete Columns in High-Rise Buildings, Murat Saatcioglu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p37-42.

High-Strength Concrete Columns: State of the Knowledge, A. Azizinamini, P. Paultre and M. Saatcioglu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p444-449.

Load Carrying Capacity of SPC Composite Column, Toshiyuki Tanaka, Kazuo Inoue and Cheol-hwan Kim, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p827-832.

Malaysia's Twins: High-Rise, High Strength, Rita Robison, CE July 94, p63-65

Metakaolin Increases Strength and Lowers Permeability of High Performance Concrete, K. Gruber, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p613.

Progress in Reinforced Concrete Column Design: An Introduction, S. Ali Mirza, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p429-431

Rigid Beam-To-Column Connection Detail for Circular Composite Columns, Atorod Azizinamini and Y. Shekar, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1155-1160.

Selected Properties of High Performance Concrete, Erik J. Sellevold, Harald Justnes, Sverre Smeplass and Einar Aasved Hansen, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p562-609.

High strength steel
Fire Resistance of Fire-Resistant Steel Columns, Sakumoto, T. Yamaguchi, T. Okada, M. Yoshida, S. Tasaka and H. Saito, ST Apr. 94, p1103-1121.

Highway accident potential

Analysis of Accident Reduction Potentials of Pavement Markings, Hashem R. Al-Masaeid and Kumares C. Sinha, TE Sept./Oct. 94, p723-736.

Highway construction

California Toll Road Off to 'Fastrak' Start, CE May 94, p19-20.

Caltrans Seismic Rehab in Fast Lane, CE June 94, p11. Connecticut Bridge-Deck is Weekend Wonder, CE Dec.

94, p21,23.

Dynamic Compaction of Landfill Beneath Embankment, Paul J. Lewis and James A. Langer, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994),

Effect of Material Properties on Compactability and Bear-ing Capacity, Chris J. Semmelink and Alex T. Visser, TE July/Aug. 94, p570-589.

Evaluating the Use of Waste Materials in Hot Mix Asphalt, Dale S. Decker, (Infrastructure: New Materials Methods of Repair, Kim D. Basham, ed., 1994), p1042-1050.

Geotech Surprises Should Be Expected, CE Dec. 94, p24.

Hit the Road, Metric, CE May 94, p8.

Indefinite Plans Beg at Indefinite Bids, CE Mar. 94, p27.

Petroleum Contaminated Soils in Highway Construction, Jay N. Meegoda, A. Samer Ezeldin, David A. Vaccari and Robert T. Mueller, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p904-911.

Requirements for Applications of Robotics and Automa-tion in Highway Maintenance and Construction Tasks, B. Ravani, S. A. Velinsky and T. H. West, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p356-364.

Seismic Research Program for Highway Construction, Ian G. Buckle and Ian M. Friedland, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994),

p373-379.

Settlements of Highway Embankments on Soft Lacustrine Deposits, Loren R. Anderson, Casan L. Sampaco, Syed H. Gilani, Edward Keane and Loren Rausher, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p376-397.

Short Aggregate Piers Defeat Poor Soils, Nathaniel S. Fox, Evert C. Lawton and Richard L. Handy, CE Dec. 94, p52-55.

Smart Highway to Monitor Traffic Loads and Climate, CE Feb. 94, p16-17.

Start-ups, CE Feb. 94, p8.

Start-Ups, CE June 94, p8.

Summary of Highway Product Evaluation Practices and HITEC Needs Survey, CERF Report No. 94-5012, Civil Engineering Research Foundation, Highway Innovative Technology Evaluation Center, 1994, 0-87262-860-4, 40pp.

Utilization of Waste Materials in Highway Construction, Serji Amirkhanian and David Manugian, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham,

ed., 1994), p919-927.

Highway costs Cutting Costs Creates Crashes, CE Feb. 94, p8.

State DOTs Tackle Problem Projects, CE Mar. 94, p18-19.

Alternative Approach to Estimation of Critical Cornering Speed, John D. Leonard, II, TE May/June 94, p478-496.

Cutting Costs Creates Crashes, CE Feb. 94, p8.

Geometric Design of Compound Horizontal Curves, B.K. Roy, TE July/Aug. 94, p674-683.

Optimum Curvature for Simple Horizontal Curves, Prianka N. Seneviratne and M. Nazrul Islam, TE Sept./Oct. 94, p773-786.

Survey Explores Ins and Outs of Innovation, CE July 94, p23.

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Unified Design of Horizontal Circular Curves, Said M. Easa, TE Jan./Feb. 93, p94-110.

Yearly Variation of Directional Distribution of Highway Traffic, Satish C. Sharma, TE May/June 93, p478-484.

Highway engineering
Congressional Meltdown, CE Dec. 94, p114.
Geogrids Help Solve Capitol's Gridlock, CE Dec. 94, p84.
Introduction, Albert F. DiMillio, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p4-10.
Poland Gets Moving, Jeff Austin, WP Special issue 94, 26, 38

p35-38.

The Road to New Construction Markets, CE Sept. 94, p8. Uncertain Reasoning in a Pavement Management System, B. N. O. Attoh-Okine, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p326-332.

Highway environmental impact

Simulating Effects of Highway Embankments on Estuarine Circulation, Jonathan K. Lee, Raymond W. Schaffranek and Robert A. Baltzer, WW Mar./Apr. 94, p199-218.

Highway improvements

Chicago Automates Expressway Lanes, Rita Robison, CE

Sept. 94, p52-55.
Integrated System to Develop Highway Rehabilitation Projects, Sarosh I. Khan, Stephen G. Ritchie and Karl Kampe, TE Jan./Feb. 94, p1-20.

Highway maintenance

Advancement of Material Handling Technologies for In-Place Asphalt Pavement Recycling, Sotiris A. Pagdadis and Ilan Ishai, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p365-373.

FRP Research for Highway Applications in Florida, Rajan Sen and Mohsen Shahawy, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994),

p280-286. House Passes National Highway Bill, NE July 94, p2. Illinois Rehabs Rural Highways the Smart Way, CE May 94, p20,22.

New Jersey May Have Best-Managed Highways (ltr), CE

Apr. 94, p30.

A New Robotic System Concept for Automating Highway Maintenance Operations, S. E. Winters, D. Hong and S.

A. Velinsky, (), p374-382.

Requirements for Applications of Robotics and Automation in Highway Maintenance and Construction Tasks, B. Ravani, S. A. Velinsky and T. H. West, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and

Paul R. Klarer, ed., 1994), p356-364.
Road-Maintenance Planning Using Genetic Algorithms. I: Formulation, W. T. Chan, T. F. Fwa and C. Y. Tan, TE

Sept./Oct. 94, p693-709.

Road-Maintenance Planning Using Genetic Algorithms. II: Analysis, T. F. Fwa, C. Y. Tan and W. T. Chan, TE Sept./Oct. 94, p710-722.

Highway management

Human Factors Design Considerations for Variable Message Freeway Signs, Jeffrey Dale Armstrong and Jona-than E. Upchurch, TE Mar/Apr. 94, p264-282. Integrated System to Develop Highway Rehabilitation Projects, Sarosh I. Khan, Stephen G. Ritchie and Karl

Kampe, TE Jan./Feb. 94, p1-20.

New Jersey May Have Best-Managed Highways (ltr), CE

New Jersey May 1970.

Apr. 94, P30.

Real-Time Decision-Support System for Freeway Management and Control, Hongjun Zhang and Stephen G. Ritchie, CP Jan. 94, 935-51.

Nov. 94, p1,4-5.

Highway planning

Model to Estimate Highway Earthwork Cost in Nepal, Naresh Sthapit and Hiroshi Mori, TE May/June 94,

Yearly Variation of Directional Distribution of Highway Traffic, Satish C. Sharma, TE May/June 93, p478-484.

Highway safety

Analysis of Accident Reduction Potentials of Pavement Markings, Hashem R. Al-Masaeid and Kumares C. Sinha, TE Sept./Oct. 94, p723-736.

Cutting Costs Creates Crashes, CE Feb. 94, p8.

Evaluating Roadside Hazards Using Computer-Simulation Model, Paul deLeur, Walid Abdelwahab and Francis Na-vin, TE Mar./Apr. 94, p229-245.

Severity Measures in Side-Impacts with Narrow Roadside Structures, M. H. Ray, J. F. Carney, III, M. I. Faramawi and L. A. Troxel, TE Mar./Apr. 94, p322-338.

Test and Evaluation Criteria for Side-Impact Roadside Ap-purtenance Collisions, M. H. Ray and J. F. Carney, III, TE July/Aug. 94, p633-651.

Highway structures

Construction of a Cofferdam Pressure Relief System, J. Taylor, W. L. Galbraith, G. Richters, J. E. Baka and C. C. Chang, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p93-111.

For Hospital, Nowhere to Go but Up, CE Apr. 94, p16,19. Usage of Adhesives and Composites in Highway Struc-tures, Hani G. Melhem and John R. Schlup, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p983-990.

Waterproofing a Structural Slab at Ground Anchor Locations, David L. Druss, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p77-92.

Highway surfaces

Microsurfacing Urban Pavements, David K. Hein, John J. Emery and Romualdo D'Ippolito, CE May 94, p55-57.

Highway transportation

Analysis of Potential Highway Routes to Yucca Mountain, Shashi K. Sathisan, Emelinda M. Parentela and Michael S. Lee, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1278-1285.

DOT Unveils Proposed National Highway System, CE Feb.

94, p98.

Dynamic Simulation of Tractor-Trailer-Cask System Used in Nuclear Waste Transportation, Zekai Čeylan and Cahit Evrensel, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p934-941.

Emergency Response Preparedness Analysis for Radioactive Materials Transportation, Emelinda M. Parentela, Shashi K. Sathisan, Sandeep S. Burli and Walter C. Vodrazka, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1249-1254.

Fabrication and Testing of High Strength, High Capacity, Weight Optimized Trailers, Chad Taylor, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p931-933.

Highway and Interline Transportation Routing Models, David S. Joy and Paul E. Johnson, (High Level Radioac-tive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1263-1269.

Impact of Nuclear Waste Traffic on Highways, Peter E. Sebaaly, Raj Siddharthan and Jon A. Epps, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1255-1262.

The Nevada Statewide Radioactive Materials Transportation Plan, Maria Ardila-Coulson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p150-157.

Uniform State Registration and Permitting For High-Level Radioactive Waste Transportation, James B. Reed, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p158-162.

Biaxial Testing of Brittle Repair Material for Rigid Pavements, George Z. Voyiadjis and Taher M. Abu-Lebdeh, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p964-971.

Cover-Subsidence Sinkhole Evaluation of State Road 434, Longwood, Florida, Jon Foshee and Brian Bixler, GT

Nov. 94, p2026-2040.

Damage to Highway Infrastructure 1993 Mississippi River Basin Flooding, A. C. Parola, T. E. Fenske and D. J. Hagerty, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p26-30.

Demonstration Project for Scour Instrumentation, J. D. Schall, W. R. Ivarson and T. Krylowski, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p37-42.

Development of an Expert System to Identify Hazardous Highway Spots, Joseph E. Hummer and Paul R. Sloup, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p333-340.

FEM in a Design Code Environment, Philip V. DeSantis and James E. Wild, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p454-461.

Geometric Design of Compound Horizontal Curves, B.K. Roy, TE July/Aug. 94, p674-683.

Global Network Optimization for Pavement Management, Kelvin C. P. Wang and John Zaniewski, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p474-482.

High-Wire Rehab for Historic Retaining Walls, CE Nov. 94, p14,16.

House Passes National Highway Bill, NE July 94, p2.

Implementation of Knowledge-Based GIS: A Case Study Gary S. Spring, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1332-1338.

An Inductive Knowledge-Based System for Mitigation of Bridge Fabrication Errors, Srinath Nagaraja and Hani Melhem, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1083-1090.

It's Official: HITEC Opens for Business, NE Mar. 94, p3. Level-of-Service Analysis of Toll Plazas on Freeway Main Lines, Feng-Bor Lin and Cheng-Wei Su, TE Mar./Apr. 94, p246-263.

Life After Andrew on Florida's Turnpike, Massoud Mora-di, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad

Sotani, ed., 1994), p558-566. Mathematics of Concrete Scaling, Dan F. Adkins, Gary P. Merkley and Gertrudys Brito, MT May 93, p280-288.

Mechanical Properties of Very Early Strength Concretes, S. H. Ahmad and Paul Zia, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p701-708.

An Object Oriented Highway Information System in the Client-Server Environment, Kelvin C. P. Wang and John P. Zaniewski, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p1959-1966. Overcrossing a Freeway with Water Pipelines in Dedicated Structures, Richard J. Pardini, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed.,

1994), p387-394.

A Speed Prediction Model for New Zealand Highways, Christopher R. Bennett and Roger C. M. Dunn, (Com-puting in Civil Engineering, Khalil Khozeimeh, ed., 1994), p728-734.

Statistical Evaluation of Truck Overloads, Jamshid Mohammadi and Nadir Shah, TE Sept./Oct. 92, p651-Jamshid

Systems-Level Evaluation of Automated Urban Freeways, Robert A. Johnston and Raju Ceerla, TE Nov./Dec. 94, p877-896.

Hinges

Effect of Initial Curvature on Natural Frequency of Thin Plate on Hinge Supports, Qiulin Yu, Naser Mostaghel and Kuan-Chen Fu, EM Apr. 94, p796-813.

Methods to Mitigate Thermally Induced Distortion, Fred M. Cutting, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p514-523.

Hiring practices

EEO, ADA and Hiring, Mark Disney, ME May/June 94, p18-21.

Six Steps to Better Recruiting, Bob Burfeind, ME Nov. J Dec. 94, p14-16.

The Bladensbug Marina Revitalization Project, Wesley R. Johnson and Kevin H. Deis, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p439-448.

California Blimp Hangars, Framed in Wood, Are Landmarks, CE Oct. 94, p70.

Floor to Wall Anchors in Historic Brick Buildings, W. Bradford Cross and Nicholas P. Jones, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1569.

The Future of the Past: Historic Preservation at the Metropolitan Washington Airports, H. Henry Ward, (Aviation Crossroads: Challenges in a Changing World, William

J. Sproule, ed., 1994), p8-17.

Gothic Structure and Design: Narbonne Cathedral, Vivian Paul and Robert Warden, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1568. Hanford B Reactor, Now a Half-Century Old, Is ASCE

Landmark, NE May 94, p16.

Historic Yorktown: New Bridge Keeps Old Design, Mi-chael J. Abrahams, CE Nov. 94, p46-47.

ISTEA Enhances Transportation, Douglas L. Tober, CE Oct. 94, p64-66.

Landmarking a Steel Railroad Bridge in Chile, CE July 94, p66.

Preserve and Protect, Loring A. Wyllie, Jr., CE Feb. 94, p48-51.

Restoring Freedom at the Capitol Dome, James R. Cagley,

CE June 94, p57-59. Seismic Study of Historic Bridges in Eastern United States, Constantine C. Spyrakos, Emory L. Kemp and Ramesh Venkatareddy, (Structures Congress XII, N. C. Baker,

ed. and Barry J. Loodno, ed., 1994), p380-386. Stabilization and Expansion of Historic Navy Pier, Patrick M. Doher and Bernard J. Fekete, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred

A. Klancinik, ed., 1994), p300-310.
The Structural History of the Jacob Bachmann Tavern, Jack R. Kayser and Kristina Lammi, (Structures Congress Mt., N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1570.

Talk About Your Durable Pavement, CE July 94, p8. Three-Way Trade Saves Historic Michigan Bridges, CE Nov. 94, p22,24.

History

Civil Engineering Art for Art's Sake, CE Jan. 94, p76. The Engineer As Preservationist, Marie Ennis, CE Sept. 94,

Estimating Past Precipitation and Temperature from Fossil Ostracodes, Alison Jean Smith and Richard M. Forester, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2545-2552.

Historic-Flood Evaluation and Research Needs in Mountainous Areas, Robert D. Jarrett, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p875-879.

Historical, Current and Upcoming Regulation Schedules for Lake Okeechobee, Vinio Floris, (Water Policy and Management: Solving the Problems, Darrell G. Fontane,

Management: Solving the Problems, Darriel G. Fohlane, ed. and Harry N. Tuvel, ed., 1994), p53-56. The History and Present Status of Microwave Aircraft, William C. Brown, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1482-1491.

The Importance of Being Historical: Civil Engineers and Their History, Jane Morley, El Oct. 94, p419-428.

Late Glacial Climate Estimates for Southern Nevada the Ostrocode Fossil Record, Richard M. Forester and Alison J. Smith, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2553-2561.

On the Shoulders of Giants, Francis E. Griggs, Jr., El July 94, p254-264.

Potential of Vertebrate Studies for Assessing Past Climate Variations, Stephanie D. Livingston, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p2562-2568.

Seismic Parameters from Liquefaction Evidence, James R. Martin and G. Wayne Clough, GT Aug. 94, p1345-1361.

Spring Deposits and Late Pleistocene Ground-Water Levels in Southern Nevada, Jay Quade, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p2530-2537. Talk About Your Durable Pavement, CE July 94, p8.

Understanding the Uses of History in Water Resources Planning and Management, Loretta C. Lohman, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p505-508.

Drop Height Influence on Outlet Scour, Frederick K. Doehring and Steven R. Abt, HY Dec. 94, p1470-1476.

Computer-Assisted Design of Hollow Concrete Masonry omputer-Assisted Design of Hollow Concrete Masonry Bearing Walls, Kathleen M. Bradley and Terence A. Weigel, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1703-1710.

Design of Prestressed Hollow Core Slabs with Reference to Design of Prestressed Hollow Core Stabs with Reference to Web Shear Failure, Lin Yang, ST Sept. 94, p2675-2696. Fire Resistance of Circular Steel Columns Filled with Bar-Reinforced Concrete, T. T. Lie, ST May 94, p1489-

Hollow Spheres Subjected to Sustained and Variable Loads, Wei Jiang, EM June 94, p1343-1368.

Homogeneity
Homogeneity Tests Based Upon Gumbel Distribution, Heinz D. Fill and Jery R. Stedinger, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p790-793.

Honeycomb structures

Anisotropic Plasticity Model for Foams and Honeycombs, H. L. Schreyer, Q. H. Zuo and A. K. Maji, EM Sept. 94, p1913-1930.

Hong Kong Hong Kong: The US\$10 Billion Dollar Question, Julian Weiss, WP Special issue 94, p31-34.

Dredging Equipment, Methods and Contracts, Gregory E. Breerwood, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p509-515.

The Dredging Research Program Technical Area 3, William D. Martin, (Dredging '94, E. Clark McNair, Jr., ed.,

1994), p11-17. Modeling Cap Placement at New York Mud Dump Site, Robert E. Randall, James E. Clausner and Billy H. Johnson, (Dredging '94, E. Clark McNair, Jr., ed., 1994),

p1295-1304. A Sea Turtle Deflecting Hopper Dredge Draghead, Michael P. Alexander and Glynn E. Banks, (*Dredging '94*, E. Clark Marker Level 1994), 8857,864

Clark McNair, Jr., ed., 1994), p857-864.

Sludge Hopper Design for Activated Sludge Clarifiers, O. E. Albertson, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p217-224.

Technical Area 5 - Dredging Research Program, Thomas W. Richardson, (*Dredging '94*, E. Clark McNair, Jr., ed.,

1994), p1-10

Tonnes Dry Solids Reviewed, Robert C. Rullens, Kees d'Angremond and Gerard Ottevanger, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p673-682. Uncertainty Analysis of Dredge Production with Correla-

tion, Said M. Easa, WW Sept./Oct. 94, p499-507.

Uncertainty Analysis of Dredge-Production Measurement and Calculation, Stephen H. Scott, WW Mar./Apr. 93, p193-203.

Horizontal flow

Local Scour Due to Submerged Horizontal Jet, S. S. Chatterjee, S. N. Ghosh and M. Chatterjee, HY Aug. 94, p973-992

Horizontal loads

Anisotropy Studies on Cuboidal Shear Device, N. Sivakugan, J-L. Chameau and R. D. Holtz, GT June 93. p973-983.

Behaviour of Concrete Masonry Infill - Steel Frame Struc-tures, J. L. Dawe and C. K. Seah, (Analysis and Compu-tation, Franklin Y. Cheng, ed., 1994), p67-76.

Hospitals

Building Product Model, A First Brick in Computer Integrated Construction, Michael J. Riley and Hamid H. R. Sabet, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p767-777.

For Hospital, Nowhere to Go but Up, CE Apr. 94, p16,19.

Hot-Film Response in Three-Dimensional Highly Turbulent Flows, P. Prinos, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p176-184.

Hot weather construction

Thermal Conductivity of Earth Blocks, Joe O. Akin-musuru, MT Aug. 94, p341-351.

Bridging a Gap to the Yankee Past, CE July 94, p12-13.

Coastal and Oceanographic Impact of Hurricane Andrew, Hsiang Wang and Lihwa Lin, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p791-798.

Improvements to Residential Construction on Kauai After Iniki, Ken K. Hayashida and Dennis K. Hanatani, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p617-625.

Mobile Homes Will Stand and Deliver, CE Mar. 94, p8.

A Statistical Analysis of Wind Damage to Single-Family Dwellings Due to Hurricane Hugo, Serji Amirkhanian, Peter Sparks and Sandy Watford, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1042-1047.

Statistically-Based Evaluation of Homes Damaged by Hurricanes Andrew and Iniki, Jay H. Crandell, Mark T. Gibson, Edward M. Laatsch, Mark S. Nowak and J. Albert vanOvereem, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p519-528.

Affordable Housing Solutions Offered in Pittsburg, CE May 94, pl1.

California Housing Damage Related to Expansive Soils, Richard L. Meehan and Lawrence B. Karp, CF May 94,

Critique - Manufactured Housing Session, Frank Walter, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p203-212.

Disaster Debris Management and Diversion from Hurricane Iniki, Wayne Rifer, Brenda Osterhaug and Dale Burton, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p548-557.

Evaluation of Design Wind Loads for Manufactured Homes and Needed Improvements, R. D. Marshall, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p185-194.

Federal Safety Standard for Mobile Homes Goes into Effect; ASCE Standard is Basis for New Rule, NE Aug.

94, pl.

Hurricane Andrew's Effect on Manufactured Housing, Mike Mafi, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p158-165.

The Importance of Hurricane Risk Assessment in Housing and Importance of Hurricane Risk Assessment in Housing and Improved Design and Building Practice Therein, Desmond Imbert, Patrick Drakes and David Prevat, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p684-695.

Land Development Regulations: Roadblock to Affordable Housing, Thomas J. Olenik and S. L. Cheng, UP Mar. 94, p22-27.

Lessons Learned from the Hurricanes of 1992, Ronald A. Cook, Mehrdad Soltani and Timothy A. Reinhold, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p799-802.

The Manufactured Home Dilemma, James R. McDonald, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p195-202.

Performance of Manufactured Housing in Louisiana During Hurricane Andrew, Marc L. Levitan, Leighton S. Cochran and Janet E. Levitan, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p166-175.

Some Lessons from Australian Experience, George R. Walker, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p249-258.

Survivability of Manufactured Housing in Hurricanes, John M. Dye, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p176-184

US Hurricanes of 1992 an Australian Perspective, Greg Reardon and Doug Meecham, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p642-651.

Hudson River

Flow and Chloride Transport in the Tidal Hudson River, NY, Lawrence A. Weiss, Raymond W. Schaffranek and M. Peter de Vries, (Hydraulic Engineering '94, George Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1300-1305.

Human behavior

The Day User, Marcus D. Hodges, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p506-513.

Humanware, Human Error, and Hiyari-Hat: A Template of Unsafe Symptoms, Shigoani Nishigaki, Jeannette Vav-rin, Noriaki Kano, Toshiro Haga, John C. Kunz and Kin-cho Law, CO June 94, p421–442.

Improving Contractors' Bids Using Preference Reversal

Phenomenon, Richard de Neufville and Jayme Todd Smith, CO Dec. 94, p706-719.

Limits of Reasonable Planning, Carlos M. H. Stegmann, El July 94, p246-253.

A Predictive Model of Sewage Pumpout Station Use Among Chesapeake Bay Boaters, Stuart Cottrell and Alan Graefe, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p59-68.

Trapped in an Elevator during the World Trade Center Bombing: A Personal Account, Satinder P. S. Puri, CF Nov. 94, p217-228.

Human factors

Adaptive Space Station Technologies and Systems for a Lunar Surface Return Mission, Larry Toups and Sam Ximenes, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p483-493.

Application of Lessons Learned Experience To Human Factor Engineering of the Planned Monitored Retrieva-ble Storage Facility, Dan Kane, Hok Wai Kwan and John Richardson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p351-357.

The Assessment of Future Human Actions at Radioactive Waste Disposal Sites: An International Perspective, D. R. Anderson, D. A. Galson and E. S. Patera, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1286-1291

Biosphere II - Its Effects on Space Colonization, Chris Cassidy, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p826-832.

CEOs Discuss People and Profits, ME Jan./Feb. 94, p13.

Computers Can't Replace Intuition (ltr), CE Apr. 94, p28. Construction of a Lunar Base, Dave Torres, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p799-803.

Criteria for Acceptable Wind-Induced Motions, Nicholas Isyumov, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p642-647.

Global Warming is an Expensive Nonproblem, CE Jan. 94, p30-31.

Human Error Models for Structural Reliability, Eric P. Steinberg, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p199-204. A Human Factors Approach to Waste Form Design, Michael A. Rodriguez, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p684-690.

Human Factors Design Considerations for Variable Message Freeway Signs, Jeffrey Dale Armstrong and Jona-than E. Upchurch, TE Mar./Apr. 94, p264-282.

Human Factors Engineering Applications in the Testing of the Legal Weight Truck Cask Transportation System, Thomas C. Smith, Millard Peck, III and Robert A. Sealock, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p375-380.

Human Factors in Civil and Geotechnical Engineering Failures, George F. Sowers, GT Feb. 93, p238-256.

The Human Impact of Hurricane Iniki, James K. Mitchell, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p259-267. Human-Resource Management for Twenty-First Century:

Managing Diversity, Deborah A. Foley, El Apr. 94,

p121-128

Humanware, Human Error, and Hiyari-Hat: A Template of Humanware, Human Error, and Hyar-trat. A Fernandary Unsafe Symptoms, Shigeomi Nishigaki, Jeannette Vav-rin, Noriaki Kano, Toshiro Haga, John C. Kunz and Kin-cho Law, CO June 94, p421-442. Is It Possible to Colonize Mars? Jonathan Hurley and Steve

Garcia, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p782-786.

Lunar Mining, Carrie Barkhurst, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p811-814.

Mars Terraformation Revisited, Joseph Guarascio, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p774-781.

Methodology for Comparing Lunar Settlement Designs, Keith Trivelpiece, (Engineering, Construction, and Op-erations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994, p969-798. A Near-Term, Long-Duration, Lunar Outpost Design, S.

Sture, S. D. Jolly and J. Happel, (Engineering, Construc-tion, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p237-246.

A New Airlock Approach for Human Exploration, Stephen Capps, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p206-216.

Probabilistic Evaluation of Human Perception Threshold of Horizontal Vibration of Buildings (0.125Hz to 6.0Hz), Jun Kanda, Yukio Tamura, Kunio Fujii, Tamio Ohtsuki, Kiyoto Shioya and Shinji Nakata, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p648-653

Reducing the Long-Term Effects of Zero-Gravity, Jeremi-ah Rogers and Sarah Coleman, (Engineering, Construc-tion, and Operations in Space IV, Rodney G. Galloway,

ed. and Stanley Lokaj, ed., 1994), p833-836.

Scenario Development for the Waste Isolation Pilot Plant:
Building Confidnece in the Assessment, Daniel A. Galson and Peter N. Swift, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1350-1357.

A Space Station Simulation: EXEMSI '92 A Study on Confinement and Isolation of a Mixed Crew of Four during 60 Days, J. Collet, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p494-503.

A Space Suit for Productive and Safe Extravehicular Activity (EVA), Brand Norman Griffin, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1372-1381.

roway, ed. and Stanley Lokaj, ed., 1994), p1372-1381.
Spacecab: A Concept for Commercial Human Spaceflight, Andrew Petro, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1504-1511.
"The Fiftee to Zeno Construction Processing Pr

The Effect of Zero Gravity on Bones", Elizabeth Cassell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p853-856.

Human rights

Past, Present, and Future of ASCE: Equal Opportunity Programs, Francis E. Griggs, Jr., El Apr. 94, p198-211.

Human-computer interaction

BPA Realtime Hydrologic Forecasting System for the Columbia River Basin, L. von der Heydt, L. E. Brazil and K. Jawed, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p5-8.

Computers are a Useful Tool (ltr), CE Apr. 94, p32.

Human Extender: A Material Handling System, H. Kazerooni, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p37-43.Needed: Old-Time Engineering (Itr), CE Apr. 94, p33.

An Object-Oriented Approach to PC Finite-Element Solutions, Robert J. Lang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1236-1243.

Onika: A Multilevel Human-Machine Interface for Real-Time Sensor-Based Systems, Matthew W. Gertz and Pradeep K. Khosla, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p28-36.

Operational Interactive Hydrologic Forecasting with the National Weather Service River Forecast System, Donna Page and George F. Smith, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p1-4.

Optimization of Reservoir Releases to Control River Sedimentation Using Differential Dynamic Programming, Carlos C. Carriaga and Larry W. Mays, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p13-16.

Humid areas

Surface Water Withdrawal Permits Programs for Humid Regions, J. Wayland Eheart, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p529-532.

Humidity

Creep Behavior of Structural Timber under Varying Humidity Conditions, Annika Martensson, ST Sept. 94, p2565-2582.

Observations on the Growth of an Internal Boundary Layer with a Lidar Technique, Chia R. Chu, Marc Parlange, William Eichinger and Gabriel Katul, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p519-529.

Hurricanes

Analysis of Structural Debris Generation and Disposal After Hurricane Andrew: Technical Perspective, Berrin Tansel, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p533-538.

Analyzing Wave and Storm Surge Impacts from Hurricane Andrew on the Dade County Beach Erosion Control and Hurricane Protection Project, Kimberley A. Taplin and Jon M. Hubertz, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p587-596.

Are Building Codes and/or Enforcement Adequate for Hurricane Protection? Lindsey E. Carter and Gary G. Nichols, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p626-631.

Assessment of Building Damage Sustained During Hurricane Iniki (Comparison with Hurricane Iwa), Michael K. H. Yee and Arthur N. L. Chiu, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p102-110.

Averaging Time and Maximum Speeds in Hurricanes, Naveen Aerrabotu and Timothy A. Reinhold, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p467-472.

Beliefs about Hurricane Andrew, Construction, and Evacuation, Earl J. Baker, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p31-36.

Building Code Enforcement Issues, Hindsight and Foresight, John C. Pistorino, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p125-132.

Catastrophic Hurricanes May Become Frequent Events in Caribbean and Along the United States East and Gulf Coasts, Robert C. Sheets, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p37-51.

Causes of Roof Covering Damage and Failure Modes: Insights Provided by Hurricane Andrew, Thomas Lee Smith, (Hurricanes of 1992: Lessons Learned and Implications for the Fature, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p303-312.

Coastal and Oceanographic Impact of Hurricane Andrew, Hsiang Wang and Lihwa Lin, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p791-798.

Critical Issues in Post Disaster Code Enforcement, Wilson C. Barnes and Jose D. Mitrani, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p284-293.

Critique - Manufactured Housing Session, Frank Walter, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p203-212.

Critique of Commercial Structures, Herbert S. Saffir, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p472-475.

Critique on Building Envelope Sessions, Peter R. Sparks, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p529-532.

Critique: Rebuilding and Recovery, Ben L. Sill, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p300-302.

Damage to Engineered Structures at Homestead AFB, Maurice R. Harlan, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p213-222.

Debris Removal Operations Following Hurricane Andrew, Rex M. Holmlin, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p539-547.

Demonstrated Success in Reducing Risk of Losses in a Severe Hurricane: Hurricane Omar Experience, Juan C. Tenorio and Jack B. Jones, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p716-725.

Design and Construction Deficiencies and Building Code Adherence, Mohammed S. Khan and Wimal Suaris, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p133-146.

Disaster Debris Management and Diversion from Hurricane Iniki, Wayne Rifer, Brenda Osterhaug and Dale Burton, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994, p548-557.

Economic Risk Analysis of Building Codes, James D. Englehardt, Chengjun Peng and Ahmad Namini, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p674-683.

Effects of Global Warming on Hurricane-Induced Flooding, William J. Gutowski, George F. McMahon, Shing S. Schluchter and Paul H. Kirshen, WR Mar/Apr. 94, p176-185.

Effects of Hurricanes Andrew and Iniki on Lifelines, Massoud M. Zadeh, Tom Larsen, Charles Scawthor, Craig Van Anne and Tom K. Chan, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p223-232. Engineering of the Building Envelope "To Do Or Not To Do", Norris Stubbs and Dale C. Perry, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994),

Erosion Hazards and Coastal Construction Deficiencies Observed on Kauai After Hurricane Iniki, A. Todd Davison, Charles E. Borman and Melvin Nishihara, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad So-

tani, ed., 1994), p736-745.

Estimation of V_{buss}, and Identification of the Iniki Overwash Line on Kaua'i, C. H. Fletcher, T. A. Schroeder, G. M. Barnes, B. M. Richmond and M. A. Hampton, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p746-755.

Evaluation of a Third-Generation Wave Model for the U.S. Atlantic Coast, R. E. Jensen, S. H. Houston, C. L. Vin-cent and M. D. Powell, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p433-447.

Evaluation of Design Wind Loads for Manufactured Homes and Needed Improvements, R. D. Marshall, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p185-194.

Evaluation of Roof Sheathing Fastening Schedules for High Wind Uplift Pressures, Thomas P. Cunningham, Jr., (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p330-339.

Failure of Residential Building Envelopes as a Result of Hurricane Andrew in Dade County, Florida, Clifford Oliver and Chris Hanson, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p396-508.

Failure of the Turkey Point Unit 1 Reinforced Concrete Chimney During Hurricane Andrew, W. F. Brannen, T. D. Joseph, Randolph W. Snook and Robert A. Porthouse, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p405-414.

Failures and Failure Mechanisms for Exterior Walls, Gene S. Sanders, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and

Mehrdad Sotani, ed., 1994), p509-518.

Federal Safety Standard for Mobile Homes Goes into Effect; ASCE Standard is Basis for New Rule, NE Aug.

Gust Speeds in Hurricanes, R. D. Marshall, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1457-1462.

How Tall Transmission Poles Survived Hurricane Andrew, Kou-Roung Chang, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p377-386.

The Human Impact of Hurricane Iniki, James K. Mitchell, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p259-267.

Hurricane Andrew - The Ultimate Curtain Wall Test, James Hayes Larkin, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p424-429.

Hurricane Andrew and the Central and Southern Florida Project, James W. Vearil and Christopher T. Smith, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p597-606.

Hurricane Andrew Induced Damage to Florida Power & Light's Transmission System, C. Jerry Wong, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p387-396.

Hurricane Andrew - Structural Performance of Buildings in South Florida, Edward L. Keith and John D. Rose, CF Aug. 94, p178-191.

Hurricane Andrew's Effect on Manufactured Housing, Mike Mafi, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p158-165.

Hurricane Iniki and Typhoon Omar Meteorology, Thomas A. Schroeder, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed.

and Mehrdad Sotani, ed., 1994), p84-91.

Hurricane Iniki Effects on Coral Sand and Beach Processes on Kauai, Hans-Jürgen Krock and Doug Neill, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p782-790.

Hurricane Iniki, A Hindcast, Winds, Windwaves, Swells, Storm Surge, and Wave Run-Up, C. L. Bretschneider, J. D. Agrawal, N. C. Carmella and K. A. Wohlmut, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p772-781.

Hurricane Shelter Design Criteria for Public Schools, Ajay ultricate sheller Design Charles for the Bull Schools, 1995 Shanker, R. Wayne Drummond, Raja R. Issa and Kalika Wamanacharya, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p233-240.

Hurricane Windspeeds at Inland Locations, P. J. Vickery and L. A. Twisdale, (Structures Congress XII, N. C Baker, ed. and Barry J. Loodno, ed., 1994), p473-478.

Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994, 0-7844-0046-6, 808pp.

Impact of Hurricane Andrew on Electrical Generating Facilities, W. F. Brannen, R. L. Adams and J. E. Sheetz, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p397-404.

The Importance of Hurricane Risk Assessment in Housing and Improved Design and Building Practice Therein, Desmond Imbert, Patrick Drakes and David Prevatt, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p684-695.

Improvements to Residential Construction on Kauai After Iniki, Ken K. Hayashida and Dennis K. Hanatani, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani,

ed., 1994), p617-625.

Improving the Performance of Architectrual Glazing in Hurricanes, Joseph E. Minor and Richard A. Behr, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p476-485.

The Inelastic Response of an Offshore Platform in Hurricane Andrew, Gary R. Imm, Patrick E. O'Connor and James M. Light, (Structures Congress XII, N. C. Baker,

ed. and Barry J. Loodno, ed., 1994), p7-12

Lessons Learned from the Hurricanes of 1992, Ronald A. Cook, Mehrdad Soltani and Timothy A. Reinhold, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p799-802.

Life After Andrew on Florida's Turnpike, Massoud Moradi, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad

Sotani, ed., 1994), p558-566.

Measurement and Hindcast of Hurricane Iniki Coastal Inundation, Steven Yamamoto, Scott Sullivan and Eiji Nakazaki, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p756-771.

Mobile Homes Will Stand and Deliver, CE Mar. 94, p8. Offshore Rescue, Jonathan A. French, Paul Gustafson, John S. Murk and Kellene M. Burn-Lucht, CE Oct. 94, p42-

On Hurricane-Generated Seas, Michel K. Ochi, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p374-387.

One Engineer's Wish List for Hurricane Hazard Mitigation, Ronald F. Zollo, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p268-277. Overview of Hurricane Andrew in South Florida, Ronald A. Cook, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p70-83.

Overview of Hurricane Iniki, Arthur N. L. Chiu, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed.,

1994), p92-101.

An Overview of the Federal Response to Hurricane Iniki, Frank R. Finch, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p294-299.

- Performance of Commercial Masonry Structures in Hurricane Andrew, Geoffrey W. Blaney, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p456-464.
- Performance of Manufactured Housing in Louisiana During Hurricane Andrew, Marc L. Levitan, Leighton S. Cochran and Janet E. Levitan, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p166-175.
- Performance of Offshore Platforms in Hurricane Andrew Ahsan Kareem and Charles E. Smith, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994),
- Performance of Plywood and OSB Sheathing During Hurricanes Andrew and Iniki, Edward L. Keith, (Hurricanes of 1992: Lessons Learned and Implications for the Fu-ture, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p313-329.

Performance of Prestressed Concrete Roofs During Hurri-cane Andrew, Wimal Suaris and Mohammed S. Khan,

CF Feb. 94, p16-30.

- Performance of Spun Prestressed Concrete Poles During Hurricane Andrew, Fouad H. Fouad, Norman L. Scott, Elizabeth Calvert and Michael Donovan, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p362-376.
- Performance of Traffic Signals and Signs in Hurricane Andrew, Frances K. Ashley, Ronald A. Cook and Marc I. Hoit, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p415-423.

Prestressed Concrete Failures Due to Uplift, Wimal Suaris, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1433-1438.

- Probability of Severe Hurricanes Across the Gulf of Mexi co, L. E. Chouinard and Chang Liu, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p696-705.
- Proposed Hurricane Wind Speeds for ASCE 7-95, Jon A. Peterka and Kishor Mehta, (Structures Congress XII, N. Baker, ed. and Barry J. Loodno, ed., 1994), p461-
- Redefining the Roles Insurers and Engineers Play in Hurricane Preparedness and Mitigation, Eugene L. Lecomte, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p1-9.
- Reducing the Risks of Severe Windstorm Disaster; an International Perspective, Alan G. Davenport, (Hurricanes of 1992: Lessons Learned and Implications for the Fu-ture, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p147-157.
- Relationship Between Residential Insurance Losses and Wind Conditions in Hurricane Andrew, Peter R. Sparks and Shiraj A. Bhinderwala, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p111-124.
- The Role of SEAOH in the Post-Iniki Rebuilding and Recovery Effort, Howard K. C. Lau and Michael K. H. Yee, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p278-283.

- Role of Vortex-Excited Vibrations in Damage to Power Poles in Hurricane Andrew, Richard A. Skop and Ahmad H. Namini, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p567-576.
- Shelters for Hurricane Refuge, Herbert S. Saffir, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p241-248.
- Standardizing Wind Measurements for Documentation of Surface Wind Fields in Hurricane Andrew, Mark D. Powell, Samuel H. Houston and Timothy A. Reinhold, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad So-
- tani, ed., 1994), p52-69. A Statistical Analysis of Wind Damage to Single-Family Dwellings Due to Hurricane Hugo, Serji Amirkhanian, Peter Sparks and Sandy Watford, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1042-1047.
- Statistically-Based Evaluation of Homes Damaged by Hurricanes Andrew and Iniki, Jay H. Crandell, Mark T. Gibson, Edward M. Laatsch, Mark S. Nowak and J. Albert vanOvereem, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p519-528.

Study: Thin Steel Edges Thick Wood, CE Nov. 94, p8.

- Substantiated Risk Assessment of Jacket Structure, P. S. Tromans and J. W. van de Graaf, WW Nov./Dec. 94, p535-556.
- Successes and Failures of Metal Building Systems During Hurricane Andrew, Nanette Dean, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p465-471.
- A Survey of Building Performance in Hurricane Iniki and Typhoon Omar, James W. Sheffield, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p446-455.
- Survivability of Manufactured Housing in Hurricanes, John M. Dye, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p176-184.
- Testing Methods for Roof Systems, Phillip J. Smith, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p340-349.
- Uncertainties in the Prediction of Hurricane Windspeeds, L. A. Twisdale, P. J. Vickery and M. B. Hardy, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p706-715.
- Uplift Resistance of Plywood and OSB Roof Sheathing, S. D. Shiff, D. P. Mizzell and M. D. Zaitz, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1054-1059.
- US Hurricanes of 1992 an Australian Perspective, Greg Reardon and Doug Meecham, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p642-651.
- Using GIS Technology to Assess Hurricane Damage, C. S. Papacostas, Wayne M. Hamaguchi, Harold S. Hamada and John Jaquess, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p607-616.
- Wind Action on Highrise Structures: Codes Wind Tunnel - Reality, Nicholas Isyumov, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p430-445.
- Wind Loads on Low Rise Structures: A Survey, B. L. Sill and T. A. Reinhold, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1030-1035.
- Wind Loads on Roofs of Low Rise Structures: Buffeting or Interaction, Henry W. Tieleman, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p350-361.

Wind Tunnel Testing of High-Rise Residential Buildings in Hurricane Areas, Peter A. Irwin, Mark A. Hunter, Mark Mosbat and Sanjeev M. Shah, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p663-673.

The Winds of Change? Paul Tarricone, CE Jan. 94, p42-

Hybrid simulation

The Context-Oriented Model: An improved Modeling Approach for Representing and Processing Design Standards, Han Kiliccote, James H. Garrett, Jr., Thomas J. Chmielenski and Kent A. Reed, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p145-152.

A Hybrid Algorithm for Radionuclide Estimation, E. A. Yfantis, G. T. Flatman and F. S. Makri, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2063-2068

An Object-Oriented Approach for Reinforced Concrete Design, Ajay B. Kulkarni and Kamal B. Rojiani, (Comting in Civil Engineering, Khalil Khozeimeh, ed., 1994), p161-168.

Use of a Modified Hybrid Model to Analyze the Effectiveness of Jetties in Reducing Marina Sedimentation, S. Jarrell Smith and E. J. Hayter, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p543-547.

Hydration

Cement Manufacture and Use, Paul W. Brown, ed., 1994. 0-7844-0048-2, 324pp.

Durability of Calcium Aluminate Cement Concretes, A. Capmas and C. M. George, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p377-405.

Hydration Mineralogy of Cementitious Coal Combustion By-Products, Gregory J. McCarthy and J. K. Solem-Tishmack, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994),

Hydration of Aluminate Cements, Pierre Barrett and Danielle Bertrandie, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p132-174.

Microstructural Development in High-Volume Fly-Ash Cement System, Aimin Xu and Shondeep L. Sarkar, MT Feb. 94, p117-136.

Phase Equilibria in the CaO - Al2O3 - SiO2- H2O System in Relation to Blended HAC Cements, K. C. Quillin, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p615.

Polymer Cement Composite - A Critical Review, Satish Chandra, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p15-36.

Progress in Understanding the Structure and Thermodyogress in Understanding ure Statistics and Institute namics of Calcium Silicate Hydrates, Annemarie Meike, Maria Onofrei, Carol J. Bruton and Brian E. Viani, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2590-2596.

Hydraulic conductivity

Appropriateness of One-Dimensional Calculations for Repository Analysis, Roger R. Eaton, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p1492-1500.

Borehole Fluid Dynamic Temperature Logging to Evaluate Fracture Hydraulic Properties, C.-F. Tsang, F. V. Hale, P. Bluemling and S. Vomvoris, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2655-2659.

Compacted Clay Liners and Covers for Arid Sites, David E. Daniel and Yung-Kwang Wu, GT Feb. 93, p223-237.

Consolidation of Clay Layer: Hydrogeologic Boundary Conditions, Robert L. Schiffman, John M. McArthur and Robert E. Gibson, GT June 94, p1089-1093.

Effect of Gravel on Hydraulic Conductivity of Compacted Soil Liners, Thomas L. Shelley and David E. Daniel, GT Jan. 93, p54-68.

Electrical-Resistivity Measurements for Evaluating Compacted-Soil Liners, R. J. Kalinski and W. E. Kelly, GT Feb. 94, p451-457.

Estimating Hydraulic Conductivity of Compacted Clay Liners, Craig H. Benson, Huaming Zhai and Xiaodong Wang, GT Feb. 94, p366-387.

Estimation of Field Site Flow Parameters, Yahia Majali, Salwa Rashad, John Hoopes and Tswn-Syau Tsay, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p303-307.

Hydraulic Conductivity Assessment of Slurry Wall Using Piezocone Test, M. Manassero, GT Oct. 94, p1725-1746 Hydraulic Conductivity of Compacted Clay Frozen and Thawed in Situ, Craig H. Benson and Majdi A. Othman, GT Feb. 93, p276-294.

Improved Interpretation of Hvorslev Tests, Z. Demir and T. N. Narasimhan, HY Apr. 94, p477-494.

Improving Subsurface Characterization and Prediction of Contaminant Transport, Salwa Rashad and Craig H. Benson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p277-

Mechanical Properties of Kaolinite/Fiber Soil Composite, M. H. Maher and Y. C. Ho, GT Aug. 94, p1381-1393.

Minimum Thickness of Compacted Soil Liners: 1. Stochastic Models, Craig H. Benson and David E. Daniel, GT Jan. 94, p129-152.

Minimum Thickness of Compacted Soil Liners: II. Analysis and Case Histories, Craig H. Benson and David E. Daniel, GT Jan. 94, p153-172.

Nonlinearity and Free-Surface Flow, Nazeer Ahmed, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p327-331.

Selenite Transport in Unsaturated Tuff From Yucca Mountain, James L. Conca and Ines R. Triay, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2175-2182

Spatial Distribution of Potential Near Surface Moisture Flux at Yucca Mountain, Alan L. Flint and Lorraine E. Flint, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2352-2358.

Statistical Sample Size for Construction of Soil Liners, Craig H. Benson, Huaming Zhai and Salwa M. Rashad, GT Oct. 94, p1704-1724.

Tests for Flow along Vertically Stratified Porous-Media Interfaces, Ronald B. Manila, Jr. and J. Jeffrey Peirce, EE May/June 94, p527-542.

Using Cavity Well to Determine Aquifer Thickness and Constants, Mohammad Saleem, IR May/June 94, p504-519

Vibratory Extraction of Clay Fines from Subsurface, Lakshmi N. Reddi, A. Hadim, R. N. Prabhushankar and F. Shah, EE Nov./Dec. 94, p1544-1558.

ashing of Bentonite in Laboratory Hydraulic-Conductivity Tests, Denis Marcotte, Jean Claude Marron and Marcel Fafard, EE May/June 94, p691-698.

Hydraulic design

Dual Purpose Pipeline in the 1900s Environment, Randall C. Hill and Javier Saunders, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p119-128.

HEC River Analysis System (HEC-RAS), Vernon Bonner, Gary Brunner and Mark Jensen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p376-380.

Hydraulic Design of Spillway Plunge Pool Linings, Peter J. Rae, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p396-400.

Revised Hydraulic Design of the Rio Hondo Flood Control Channel, Scott E. Stonestreet, Michael E. Mulvihill and John E. Hite, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p401-

Specification Contract Effects on Hydraulic Designs, Jeff Baysinger and Leo Kinney, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p152-158.

Using Knowledge Based Systems for Training the Young Engineer, James Crum and Michael Mulvihill, (Comput ing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1286-1293.

Utilizing Mathcad for Hydraulic Design of Stormwater Pump Stations, T. Chris Evensen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p814-821.

Hydraulic engineering Bantamweight Jack Gives Atlas Performance, CE Oct. 94,

p86. Influence of Liquid Length Variation in Hydraulic Transients, Enrique Cabrera, José Abreu, Rafael Pérez and Antonio Vela, HY Dec. 92, p1639-1650.

Integration of Reliability, Uncertainty and Optimization in Hydraulics Systems: Classification of Problem Types, Kevin E. Lansey, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p262-265.

Integration of Reliability, Uncertainty and Optimization in Hydraulics Systems: Structural Reliability, Kevin E. Lansey, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel,

ed., 1994), p266-269.

Recommendations for Standards in Hydraulics, Task Committee on Recommendations for Standards in Hydraulics of the Hydraulics Division of the American Society of Civil Engineers, (George Hecker, chmn.), 1994, 0-87262-971-6, 170pp.

Sensitivity Analysis of Bridge Equations, Jeffrey S. Glenn, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p11-15.

A Deep Soil Mix Cutoff Wall at Lockington Dam, Ohio, Andrew D. Walker, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p133-145.

Prospects of Vacuum-Assisted Consolidation for Ground Improvement of Coastal and Offshore Fills, S. Thevanayagam, E. Kavazanjian, Jr., A. Jacob and I. Juran, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p90-105.

Vacuum-Assisted Consolidation of a Hydraulic Landfill, A. Jacob, S. Thevanayagam and E. Kavazanjian, Jr., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1249-1261.

Hydraulic fracturing

The Mechanics of Cracking in Embankment Dams, James R. Talbot, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p118-131.

Hydraulic gradients

Design Relationship for Filters in Bed Protection, K. J. Bakker, H. J. Verheij and M. B. de Groot, HY Sept. 94, p1082-1088.

Heavy Metal Removal from Soil by Coupled Electric-Hydraulic Gradient, Lutful I. Khan and M. Sahidul

Alam, EE Nov./Dec. 94, p1524-1543.

Movement of Colloids Under Hydraulic Gradients, Rao S. Govindaraju and Lakshmi N. Reddi, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p322-326.

Results of Air-Permeability Testing in a Vertical Borehole at Yucca Mountain, Nevada, G. D. LeCain and J.N. Walker, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2782-2788.

Hydraulic jump

Analysis of blocking phenomena in bifurcated channels found in mountainous rivers. Kazuyoshi Hasegawa and Toshinao Mizugaki, (Hydraulic Engineering '94, George V. Cottoneo, ed. and Ralph R. Rumer, ed., 1994), p829-833.

Behavior of Hydraulic Jump Basins, Boualem Hadjerioua, Emmett M. Laursen and Margaret S. Petersen, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p416-420.

Characteristics of Supercritical Flow below Sluice Gate, Iwao Ohtsu and Youichi Yasuda, HY Mar. 94, p332-346.

Countercurrent Jet Device, Willi H. Hager, HY Apr. 94, p504-517.

Flow patterns in a mountain stream, Lisa C. Hubbard and Colin R. Thorne, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

p737-741.

Hydrodynamic Forces in Hydraulic Jump Stilling Basi António N. Pinheiro, António C. Quintela and Carlos M. Ramos, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p321-330.

Impact Hydraulic Jump, Willi H. Hager, HY May 94,

p633-637.

Incipient Hydraulic Jump at Channel Junctions, George C. Christodoulou, HY Mar. 93, p409-421.

A Numerical Study of Hydraulic Jump and Mixing in a

Stratified Channel With a Sill, Ping Chen, R. Grant Ingram and Jianping Gan, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p119-133.

Simple Internal Waves and Bores, J. Bühler, HY May 94,

p638-645.

Supercritical Flow in Circular-Shaped Side Weir, Willi H. Hager, IR Jan./Feb. 94, p1-12.

Hydraulic loading

Design Relationship for Filters in Bed Protection, K. J. Bakker, H. J. Verheij and M. B. de Groot, HY Sept. 94, p1082-1088.

Hydraulic models

Analysis of Levee Design in a Mountain River Using Two-Dimensional Flow Modeling, Diane M. L. Mas, Andrew J. Miller, James A. Smith and Wei-hao Chung, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p757-761.

Elmhurst Quarry Flood Control Project, Anthony J. Charlton, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed.,

1994), p107-110.

Evaluating Sensitivity of Hydraulic Control Optimization Models, David P. Ahlfeld and Jonathan D. Dombek, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p185-188.

Hydraulic Analysis of the Water Distribution System, Vail Valley Consolidated Water District, Vail, Colorado, Mark Rosser and Kevin W. McBrien, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H.

Wegener, ed., 1994), p452-472.

Hydraulic Model Studies of Recessed Curb Inlets and Bridge Drains, E. R. Holley, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p528-532.

An Improved Design of Excluding Sediment into River In-take Structures, Wu-Sung Ke, Sue-Jen Wu and Che-Yuan Huang, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1193-

Irregular Wave Run-Up on Composite Rough Slopes, Marek Szmytkiewicz, Ryszard B. Zeidler and Krystian W. Pilarczyk, (*Coastal Dynamics '94*, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p599-613.

Laboratory and Field Evaluation of Acoustic Velocity Meters, Tracy Vermeyen, (Fundamentals and Advance-ments in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p43-52.

Large-scale Modeling of a Water-Distribution System, Christopher T. Stern, CC May 94, p1-7.

MAC3D: Multiblock Numerical Model for Hydraulic Ap-Pilications, Robert S. Bernard, (Hydraulic Engineering 194, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p507-511.

Mixing of Thermal Discharges at Low Froude Numbers, C. Liang Lee and Patrick J. Ryan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p538-542.

Objectives of Proposed Large Scale Experimental Facility (ESTEX), T. M. Parchure, W. H. McAnally, Jr. and G. Nail, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p809-814

Sediment Modeling in the Rio Grande Conveyance Channel, Drew C. Baird and Cassie C. Klumpp, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1151-1155.

Sewers and Computers, Rodolfo B. Fernandez and Brian W. Daniels, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p836-842.

Sines West Breakwater Emergency Repair, Hydraulic Studies, H. Ligteringen, J. W. van der Meer and M. Rita, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p99-123.

Stratified Flow in an Impounded Inland River, Emmet M. Owens and William R. Naumann, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p569-573.

Use of a Modified Hybrid Model to Analyze the Effectiveness of Jetties in Reducing Marina Sedimentation, S. Jarrell Smith and E. J. Hayter, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p543-547.

Using GIS to Develop 2-D Hydraulic Models, Craig R. Wilkening, Lynn E. Johnson and Joel Herr, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p136-140.

Wave Height From Deep Water Through Breaking Zone, J. William Kamphuis, WW July/Aug. 94, p347-367.

What is Computational Hydraulics? Angelos N. Findikakis, A. Blumberg, R. Schmalz and K. Bedford, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p482-486.

Hydraulic performance

Estimating Two-Phase Hydraulic Properties by Inverse Modeling, Stefan Finsterle and Karsten Pruess, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2160-2167

Flow Analysis Used to Diagnose Pipe Capacity and Sewer Overflow Problems in Sydney, Australia, Patrick A. Hayes, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p439-451.

Improvement and Re-establishment of Good Hydraulic Conditions in Sewers: The French Experience, Y. Diab and M. Mommessin, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p329-

Intelligent Decision Support System for Stage Discharge Analysis, Slobodan P. Simonovic, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p283-286.

Optimizing Secondary Clarifier Performance: A Presenta-tion Outline, John K. Esler, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p202-208.

Visual Investigation of Field Bed-Load Sampling, Mous-tafa T. K. Gaweesh, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p233-241.

Hydraulic pressure

Hydraulic Pipe Reshaper, ET Aug./Sept. 94, p10.

Use of Hydraulic Control Valves in Deep-Well Pump Station Design Under Low/No Discharge Pressure, Jorge A.
Garcia and Les Coffman, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p62-72.

Hydraulic properties

Borehole Fluid Dynamic Temperature Logging to Evaluate Fracture Hydraulic Properties, C.-F. Tsang, F. V. Hale, P. Bluemling and S. Vomvoris, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2655-2659.

Characterization of a Desert Soil Sequence at Yucca Mountian, NV, William R. Guertal, Alan L. Flint, Lon L. Hofmann and David B. Hudson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2755-2763.

Constraining Local 3-D Models of the Saturated-Zone, Yucca Mountain, Nevada, G. E. Barr and Sharon A. Shannon, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p1814-1821.

Effective Unsaturated Hydraulic Property Determination with the Renormalization Group Approach: Methodology, Sitakanta Mohanty and Amvrossios C. Bagtzoglou, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2660-2668.

Effects of Flow Duration on Local Scour at Bridge Piers in New York, Gerard K. Butch and Richard Lumia, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p46-50.

Estimating Two-Phase Hydraulic Properties by Inverse Modeling, Stefan Finsterle and Karsten Pruess, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2160-

Experimental Study on Unsteady Flow in Open Channels with Flood Plains, A. Tominaga, M. Nagao and I. Nezu, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p396-405.

Kwicklis, Edward M. Alan L. Flint and Richard W. Healy, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p2341-2351.

Stochastic Analysis of Unsaturated Flow and Transport With the Suflat Executive Numerical Code, Amvrossios With the Sunar Executive Fundamental Code, Full Vision C. Bagtzoglou, M. Rashidul Islam and Michael Muller, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2669-2677.

Wetting Phase Permeability in a Partially Saturated Horizontal Fracture, M. J. Nicholl and R. J. Glass, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2007-

Hydraulic roughness

At-A-Site Mountain River Flow Resistance Variation, James C. Bathurst, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p682-686.

Bed Load Roughness in Supercritical Flow, Scott E. Stonestreet, Ronald R. Copeland and Darla C. McVan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p747-751.

Design of Manning's-Rougness-Coefficient Study in New York State, William F. Coon, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p677-681. Dimensionally Homogeneous Manning's Formula, Ben Chie Yen, HY Sept. 92, p1326-1332.

Roughness Coefficients for High-Gradient Channels in New York State, William F. Coon, (Hydraulic Engineer-ing '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p722-726.

Sheet Flow Resistance of Asphaltic Pavements, Joseph R. Reed, John C. Warner and Richard S. Huebner, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1100-1104.

Hydraulic structures

Broad-Crested Weir, Willi H. Hager and Markus Schwalt, IR Jan./Feb. 94, p13-26.

Effect of Bridge Pier Shape and Contraction Ratios on Backwater Profile, Sabah Al-Nassri, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p563-568.

Energy Dissipation for a RCC Stepped Spillway, Charles E. Rice and Kem C. Kadavy, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p548-552.

Experimental Design and Measurement Techniques for Investigation of Two-Phase Flow, Andreas J. Kuck, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p86-93.

1994, pa6-93.
Hydraulic Engineering '94, 2 vols, ISSN: 1070-1559, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994, 0-7844-0037-7, 1375pp.
Innovative Applications of Precast Concrete in Repair of Hydraulic Structures, James E. McDonald, (Infrastructure: New Materials and Methods of Repair, Kim D.

Basham, ed., 1994), p963-970.

Numerical Simulation of One Dimensional Transcritical Flow, Ehab A. Meselhe, Fotis Sotiropoulos and Forrest M. Holly, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p512-

Plunge-Pool Scour by Inclined Jets, Assem M. Afify and Gilberto E. Urroz, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

1994), p1217-1224. Scour Hole Depth Downstream of the SAF stilling Basin,

M. Shafai-Bajestan, A. Sayahi and M. L. Albertson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1045-1049.

Using the Weir Back as an Energy Dissipator, Abdelkawi Khalifa, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p436-

Velocity of Air-Core Vortices at Hydraulic Intakes, John E. Hite, Jr. and Walter C. Mih, HY Mar. 94, p284-297.

Hydraulic transients

Hydraulic Transients in Two Acid Transfer Lines, Muin M. Baasiri, (Hydraulics of Pipelines, Deon T. Fowles, ed.

and Douglas H. Wegener, ed., 1994), p129-151.
Influence of Liquid Length Variation in Hydraulic Transients, Enrique Cabrera, José Abreu, Rafael Pérez and Antonio Vela, HY Dec. 92, p1639-1650.

3D Free Surface Flow Model Verification - A Panel Dis-cussion on Test Cases, Sam S. Y. Wang, (Hydraulic En-gineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p910-912.

Application of Numerical Models in the Design of Clarifiers, J. A. McCorquodale and S. P. Zhou, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p186-193.

Applications of Optimal Hydraulic Control to Ground-Water Systems, David P. Ahlfeld and Manoutchehr Heidari, WR May/June 94, p350-365.

Bias in Regression Estimates of Manning's n, Kenneth L. Wahl, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p727-731.

Boundary Conditions and Flow Patterns in a Mountain River, Andrew J. Miller, Diane M. L. Mas, James A. Smith and Wei-Hao Chung, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p762-766.

1994), p702-700.
Bridge Scour During the 1993 Floods in the Upper Mississippi River Basin, Gordon G. Barksdale, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p21-25.
Broad-Crested Weir, Willi H. Hager and Markus Schwalt, Upper Carlotte, 1994, p. 12-25.

IR Jan./Feb. 94, p13-26.

Characterization of Incised Channel Development, Chester Watson, Daniel Gessler and Ronald R. Copeland, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p969-973.

A Characterization Study of Fractured Rock, Kenzi Karasaki, Barry Freifeld and Cliff Davison, (High Level Radioactive Waste Management, High Level Radioac-

rive Waste Program Committee, 1994), p2423-2428.
Clear-Water Scour around Bridge Pier Group, Nandana Vittal, U. C. Kothyari and Morteza Haghighat, HY Nov.

94, p1309-1318.

Coal Log Pipeline Technology: State of Development, Henry Liu and Charles W. Lenau, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p280-287.

Computation Method for Regulating Unsteady Flow in Open Channels, Fubo Liu, Jan Feyen and Jean Ber-lamont, IR Sept./Oct. 92, p674-689.

Computer-Assisted Instruction in Civil Engineering, Thomas Froese, Sundar Prasad, Jeff Friesen and Dan Zollman, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1647-1654.

Critical and Supercritical Flows in two Unstable, Mountain Rivers, Toutle River System, Washington, Andrew Simon and J. H. Hardison, III, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p741-745.

Depth-Averaged Flow Model in Curvilinear Coordinates, Hector R. Bravo, (Hydraulic Engineering '94, George Cotroneo, ed. and Ralph R. Rumer, ed., 1994).

p517-521.

Design of Fluidizer Systems for Coastal Environment, Richard N. Weisman and Gerard P. Lennon, WW Sept./ Oct. 94, p468-487.

Drawdowns for Leaky-Aquifer Flow with Storage in Fi-nite-Width Sink, Louis H. Motz, IR July/Aug. 94, p820-

Effect of HRT on Acidogenic Digestion of Primary Sludge, P. Elefsiniotis and W. K. Oldham, EE May/June 94, p645-660.

Effects of Commercial Vessel Passage in Narrow Channels With and Without Ice Cover, John G. Lyon, Donald C. Williams and Kevin G. Flannigan, CR June 94, p47-64.

Equilibrium Geometry of Channels with Cohesive Banks, R. G. Millar and M. C. Quick, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p964-968.

Evaluation of Supercritical/Subcritical Flows in High-Gradient Channel, Douglas J. Trieste, HY Aug. 92, p1107-1118.

Experimental Study on Turbulent Structures in Unsteady Open-channel Flows, Iehisa Nezu, Akihiro Kadota and Hiroji Nakagawa, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p185-194.

Expert Analysis in Regulated Irrigation Canal Modelling, Forrest M. Holly, Jr. and John P. Parrish, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p92-96.

Field Evaluation of the Sediment Transport Model 'Stream" with a Bank Erosion Component, Deva K. Borah and Mona S. Dashputre, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p979-983.

Flow-Bed Interaction and Energy Loss in Torrents, Luis Ayala and Alejandro López, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p687-691.

Fortification of MMOC Models for Steep-Channel Flows, Chintu Lai, Der-Liang Young and Jen-Ter Chang, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1290-1294.

Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994,

0-7844-0036-9, 546pp.

Future Trends and Needs in Hydraulics, Daryl B. Simons, HY Dec. 92, p1607-1620.

General Formulation of Best Hydraulic Channel Section, Parviz Monadjemi, IR Jan./Feb. 94, p27-35.

A General Theory of Channel Adjustment in High Gradient Streams, Gordon E. Grant, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p817-818.

GIS Application for Floodplain Analysis and Mapping, David J. Greenwood, Ramzi K. Bannura and Myles E. Powers, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p232-

Good Software, and It's Free, Too, David Angelotti, CC June 94, p1-6.

- Graphical Network Model Simplifies Water Analysis, Michael D. Larkin, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p296-
- High-Resolution Upwind Schemes for Solving Mass Transport Equation, Jihn-Sung Lai, Hsieh Wen Shen and Dihua Zhao, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p497-
- Historic-Flood Evaluation and Research Needs in Mountainous Areas, Robert D. Jarrett, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p875-879.
- Hydraulic Age Distribution in Perfectly Mixed Non-Steady-State Reactors, Marcelo Juanico and Eran Friedler, EE Nov./Dec. 94, p1427-1445.
- Hydraulic Conditions Required to Move Unanchored Residue Materials, J. E. Gilley, E. R. Kottwitz and G. A. Wieman, IR May/June 94, p591-606.
- Hydraulic Engineering '94, 2 vols, ISSN: 1070-1559, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994, 0-7844-0037-7, 1375pp.
- Hydraulic Residence Time of CSTRs under Unsteady-State Condition, Jian Peng, EE Nov/Dec. 94, p1446-1458.
- Hydraulics and Hydrology for the User, Randel L. Dy-mond, CC May 94, p1,12-14.
- Hydraulics and Sediment Transport Processes in a Pool-Riffle Rocky Mountain Stream, Douglas M. Thompson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p849.
- Hydraulics of Center-Pivot Laterals, Edmar J. Scaloppi and Richard G. Allen, IR May/June 93, p554-567.
- An Improved Design of Fishways Under High Variation of Headwater, Kuo-Cheng Hsieh, Sue-Jen Wu and Che-Yuan Huang, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p457-
- Improved Hydraulic Features of the HEC River Analysis (HEC-RAS), Gary W. Brunner and Steven S. Piper, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p502-506.
- Improvement and Re-establishment of Good Hydraulic Conditions in Sewers: The French Experience, Y. Diab and M. Mommessin, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p329-338
- Incipient Hydraulic Jump at Channel Junctions, George C. Christodoulou, HY Mar. 93, p409-421.
- Instability of Sandbars in Grand Canyon, Muniram Budhu and Roger Gobin, HY Aug. 94, p919-933.
- Instrumentation Needs and Possibilities: A Dialogue Between Suppliers and Users, Robert Ettema and Vito Latkovitch, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p539-540.
- Kent, Edward, John Richardson and Vijay Panchang, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p56-60.
- Measuring Water in Trapezoidal Canals, Zohrab Samani and Henry Magallanez, IR Jan./Feb. 93, p181-186.
- Modeling of Maximum Velocity in Open-Channel Flow, Chao-Lin Chiu and Chairil A. Said, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p381-385.
- Modeling Pipe Networks Dominated by Junctions, Don J. Wood, L. Srinivasa Reddy and J. E. Funk, HY Aug. 93, p949-958
- Modeling Unsteady Open-Channel Flows—Modification to Beam and Warming Scheme, Akhilesh Kumar Jha, Juichiro Akiyama and Masaru Ura, HY Apr. 94, p461-
- Multicomponent-Flow Analyses by Multimode Method of Characteristics, Chintu Lai, HY Mar. 94, p378-395.
- A new approach for the estimation of extreme roughness in torrents by Hydraulic and Photogrammetry, Hanspeter Hodel, Thomas P. Kersten and Isidor Storchenegger, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p697-701.

- A New Basic Principle for a New Series of Hydraulic Measurements. Erosion by Abrasion, Corrosion, Cavitation and Sediment Concentration, Lucien Chincholle, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p301-310.
- Non-steady-Flow Type Curves for Strip Aquifers with Constant Drawdown, Halil Onder, IR July/Aug. 94, p732-741.
- On Habitat Simulation in Mountain Rivers, Robert T. Milhous, (Hydraulic Engineering '94, George Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p850-
- Optimal Control of Water-Supply Pumping Systems, Lin-dell E. Ormsbee and Kevin E. Lansey, WR Mar./Apr. 94,
- Optimal Rehabilitation Model for Water-Distribution Systems, Joong Hoon Kim and Larry W. Mays, WR Sept./ Oct. 94, p674-692.
- Optimizing River Diversion under Hydraulic and Hydrologic Uncertainties, Abbas Afshar, Ahmad Barkhordary and Miguel A. Mariño, WR Jan./Feb. 94, p36-47.
- Palaeohydraulic reconstruction of floods in upland UK bedrock streams: progress, problems and prospects, Paul A. Carling, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p860-
- Partial Infeasibility Method for Chance-Constrained Aquifer Management, Nathan Chan, WR Jan./Feb. 94, p70-
- Particle Dynamics and Bed Level Adjustments in a Mountain Stream, Paul A. Carling, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p839-843.
- Planning, Assessing and Implementing Diagnostic Rehabilitation Options, B. Jay Schrock, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p101-110.
- Protection Against Scour at SAF Stilling Basins, Charles E. Rice and Kem C. Kadavy, HY Jan. 93, p133-139.
- Real-Time Data Collection of Scour at Bridges, David S. Mueller and Mark N. Landers, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p104-113.
- Recent Advances In Well Hydraulics, Otto J. Helweg and S. Sunita, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p608-611.
- San Francisco Bay Test Case for 3-D Model Verification, Peter E. Smith, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p885-
- Sediment Modeling in the Rio Grande Conveyance Chan-
- Seament Modeling in the Kio Grande Conveyance Chan-nel, Drew C. Baird and Cassie C. Klumpp, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1151-1155. SemiActive Structural Control: A Low Cost Fix for An In-frastructure at Risk, C. C. Kuo, H. Wu, L. Liu, R.L. Sack, A. Ebrahimpour and W. N. Patten, (Structures Connerse VII. N. C. Belge, ed. and Bergy, I. Locke, ed. Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p387-392.
- Sewerage Failure, Diagnosis and Rehabilitation, J. W. Del-(Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Pro-
- grams and Techniques, ASCE, 1994), p11-28.
- grams and recniques, ASCE, 1994), p.11-28. Shock-Wave Reduction by Bottom Drop, Markus Schwalt and Willi H. Hager, HY Oct. 94, p.1222-1227. Stability Principle of Critical Flow Depth in a Moving Coordinate System, Cheng-lung Chen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer ed. 1904), p.1262. mer, ed., 1994), p1263.
- Step Pool Geometry and Flow Characteristics in Low-Sediment-Storage Channel Beds, Tamir Grodek, Moshe Inbar and Asher P. Schick, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p819-823.

Stochastic Fluid Travel Times in Heterogeneous Porous Media, Wade E. Hathhorn and Randall J. Charbeneau,

HY Feb. 94, p134-146.

Stochastic Modeling of Spatial Heterogeneities Condi-tioned to Hydraulic and Tracer Tests, Akhil Datta Gupta, D. W. Vasco, J. C. S. Long and Straits Vomvoris, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2624-2632

Streamflow Related to Channel Geometry in Northern New England, Kevin J. Palaia and S. Lawrence Dingman, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p865-869.

Study of Friction Factors in the Upper Reaches of the Rio Grande, Cassie C. Klumpp and Drew C. Baird, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p702-706.

A Study on Mathematical Model for Sediment Yield in Mountain Regions with Large Hillside Slopes, Duo Fang and Guoliang Yu, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994). p752-756.

Sudden Pressure Drop and Pipeline Failure - Case Studies, E. John List, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p339-355.

Supercritical Flow in Circular-Shaped Side Weir, Willi H.

Hager, IR Jan./Feb. 94, p1-12.

Testing Turbine Aeration for Dissolved Oxygen Enhancement, Tony L. Wahl, Jerry Miller and Doug Young, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p425-434.

Transient Radius of Influence Model, Shu Tung Chu, IR

Sept./Oct. 94, p964-969.

Treatment of Nonhomogeneous Terms in Flow Models, Raymond W. Schaffranek and Chintu Lai, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p522-527.

Tug Fork Flood Plain Modifications and Wetlands Mitigation, M. A. Ports, D. D. Dee, Jr. and C. Riling, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p766-

Variational Theories in Hydrodynamics and Hydraulics, Chih Ted Yang, HY June 94, p737-756.

What is Computational Hydraulics? Angelos N. Findikakis, A. Blumberg, R. Schmalz and K. Bedford, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p482-486.

Width and Depth-Constrained Best Trapezoidal Section, David C. Froehlich, IR July/Aug. 94, p828-835. Yellowman Siphon Rehabilitation, Scott A. Stevens, (Hy-

draulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p82-88.

Hydrocarbons

CDR - A Chemical Solution to a Mechanical Problem, Gary E. Blizzard, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p172-181.

Clearing the Air About Sludge Incinerator Emissions, Phil-lip M. Martin, Eugene W. Waltz and Richard D. Kuchenrither, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p122-128.

Fate/Transport Modeling and Remediation of Contaminated Plume at Vance Airforce Base, Avdhesh K. Tyagi and Sharon H. Carpenter, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p287-292

Immiscible Organic Liquid Recovery Using Unconfined Membranes, Leonard Jewell and Michael J. Semmens, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p90-

Kinetics of Toluene Degradation by Denitrifying Aquifer Microorganisms, Pedro J. J. Alvarez, Paul J. Anid and Timothy M. Vogel, EE Sept./Oct. 94, p1327-1336.

Petroleum Hydrocarbons in Detention-Basin Sediments, Thomas J. Maldonato and Christopher G. Uchrin, EE May/June 94, p683-690.

Simple 'Soda Straw' Sucks Hydrocarbons From Ground

Water, ET Aug./Sept. 94, p5.

Thermally Enhanced Bioremediation of a Gasoline-Contaminated Aquifer Using Toluene Oxidizing Bacteria, Rula Deeb and Lisa Alvarez-Cohen, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p400-407.

Hydrodynamic pressure
Beam Model for Base-Uplifting Analysis of Cylindrical
Tanks, P. K. Malhotra and A. S. Veletsos, ST Dec. 94, p3471-3488

Nonlinear Hydrodynamic Pressures on Arch Dam Faces, Bang-Fuh Chen and Ing-Sen Yuan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p411-415.

Uplifting Analysis of Base Plates in Cylindrical Tanks, P. K. Malhotra and A. S. Veletsos, ST Dec. 94, p3489-

3505.

Hydrodynamics

Mydrodynamics (2DV Circulation-Pattern: Wave Decay and Undertow Modelling with Nearcir Code, F. Collado, A. Sánchez-Arcilla, M. G. Coussirat and J. Prieto, (Coastal Dynamics '94, S. S-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p556-570.

Alternative Formulation of Laterally Averaged Hydrody-namics, John Eric Edinger, Edward M. Buchak and Zhenyu Zhang, HY July 94, p886-890. Ambrose, R. B. T. S. Wu and S. C. McCutcheon, (Hydrau-

lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p890-894.

Analyzing Larval Fish Distributions Using Hydrodynam and Transport Modelling, John Eric Edinger, Edward M. Buchak and Michael D. McGurk, (Estuarine and Coastal Modeling III. Malcolm L. Spaulding, ed., Keith Berford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p536-550.

Application of WQMAP to Upper Narragansett Bay, Rhode Island, J. C. Swanson and D. L. Mendelsohn, (Es-tuarine and Coastal Modeling III, Malcolm L. Spauld-ing, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p656-678.

Applications of Large Domain Hydrodynamic Models to Generate Frequency-of-Occurrence Relationships, Norman W. Scheffner, Leon E. Borgman and David J. Mark, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p264-

Assessing the Impact of Channel Deepening in Delaware Bay Through Numerical Modeling, K. W. Kim, B. H. Johnson and J. Gebert, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p29-41.

Characterization of Circulation and Salinity Change in Galveston Bay, Keh-Han Wang, EM Mar. 94, p557-579. Circulation and Flushing in Casco Bay, Maine, Bin Gong and Bryan R. Pearce, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1039-1046.

A Comparative Analysis of Estuarine Circulation Simulation Using Laterally Averaged and Vertically Averaged Hydrodynamic Models, C. Kirk Ziegler, Jerad D. Bales, Jeanne C. Robbins and Alan F. Blumberg, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng,

ed. and Craig Swanson, ed., 1994), p447-460.
Conservation Properties of the Mild Slope and Boussinesq Equations, Rodney J. Sobey, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Henryley ed. 1994) 135-1469

chael Hemsley, ed., 1994), p135-149.

Daily Procedure for GLFS Nowcasts, Chieh-Cheng J. Yen, John G. W. Kelley and Keith W. Bedford, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p.202-206.

Demonstration of the Wes New York Bight Hydrodyna and Myddiain Logo Librae Street S. Box Membrahaman.

Canonistration of the Wes New York Bight Hydrodynamic Model in Long Island Sound, S. Rao Vemulakonda and Norman W. Scheffner, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p309-322.

- Design and Execution of Hydrodynamic Field Data Collection using Acoustic Doppler Current Profiling Equipment, Timothy L. Fagerburg and Thad C. Pratt, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p530-538.
- Development and Application of a Three-Dimensional Boundary-Fitted Circulation Model in Providence River, Muslim Muin and Malcolm Spaulding, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p432-446.
- Development of Long-Term Three-Dimensional Hydrodynamics in Long Island Sound for Use in Water Quality Modeling, Richard A. Schmalz, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), pl316-1320.
- Diffusion Hydrodynamic Model of Shallow Estuary, G. L. Guymon, M. N. Khan, M. Collins and T. V. Hromadka, WR Mar./Apr. 94, p253-266.
- The DUCK94 Nearshore Field Experiment, William A. Birkemeier and Edward B. Thornton, (Coastal Dynamics '94, A. S.-Arcilla, ed., Stev J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p815-821.
- Evaluation of Depth-Limited Wave Breaking Criteria, George M. Kaminsky and Nicholas C. Kraus, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p180-193.
- Free-Vibration Analysis of Tank Containing Two Liquids, Yu Tang, EM Mar. 94, p618-636.
- The Generation and Use of Site Specific Wave and Current Databases for Dredged Material Fate Predictions, Norman W. Scheffner, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p190-199.
- GLFSVIEW GLFS Product Viewing Application, Yi-Fei P. Chu, Chieh-Cheng J. Yen and Keith W. Bedford, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p207-211.
- The Great Lakes Forecasting System: An Overview, Keith W. Bedford and David J. Schwab, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p197-201.
- Hybrid Noninertia and Statistical Model Versus Hydrodynamic Routing, Hussam E. S. Fahmy and Hubert J. Morel-Seytoux, HY June 94, p706-721.
- Hydraulic Transients in Two Acid Transfer Lines, Muin M. Baasiri, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p129-151.
- Hydrodynamic Behavior of Compound Rectangular Open Channels, Dan Naot, Iehisa Nezu and Hiroji Nakagawa, HY Mar. 93, p390-408.
- Hydrodynamic Forces in Hydraulic Jump Stilling Basins, António N. Pinheiro, António C. Quintela and Carlos M. Ramos, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p321-330.
- Hydrodynamic Modeling of San Diego Bay, Parmeshwar L. Shrestha, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p140-144
- Hydrodynamic Processes on the Lower Shoreface of the Dutch Coast, Piet Hoekstra and Klaas T. Houwman, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p852-866.
- Hydrodynamics of Mining Pits in Erodible Bed under Steady Flow, Mohammad Akram Gill, HY Nov. 94, p1337-1348.
- Hydrodynamics of Random Wave Boundary Layers, B. A. O'Connor, H. Kim and J. J. Williams, (*Coastal Dynamics '94*, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p879-893.
- Image Analysis of Surf Zone Hydrodynamics, J. M. Redondo, A. Rodriguez, E. Bahia, A. Falqués, V. Gracia, A. Sánchez-Arcilla and M. J. F. Stive, (*Coastal Dynamics* '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p350-365.

- Linking Hydrodynamic and Biogeochemical Transport Models for Estuarine and Coastal Waters, J. M. Hamrick, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p591-608.
- Localized Sigma Coordinates for the Vertical Structure of Hydrodynamic Models, Angré B. Fortunato and António M. Baptisat, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p323-335.
- Modeling Horizontal Round Buoyant Jets in Shallow Water, A. J. Johnston, C. R. Phillips and R. E. Volker, HY Jan. 94, p41-59.
- Modeling of Dissolved Ozone Concentration Profiles in Bubble Columns, Hongde Zhou, Daniel W. Smith and S. J. Stanley, EE July/Aug. 94, p821-840.
- A Nearshore Model for Cleveland CSO Remediation Design Selection, David P. Podber, Chieh-Cheng J. Yen, Lou Regenmorter, Keith W. Bedford and Onyx W. H. Wai, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p222-226.
- New Methodology for Optimization of Freshwater Inflows to Estuaries, Yixing Bao and Larry W. Mays, WR Mar./ Apr. 94, p199-217.
- Numerical Decomposition of Eulerian Residual Circulation in Long Island Sound, Richard A. Schmalz, Jr., (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p294-308.
- Numerical Modeling of Advective and Diffusive Transport in the Rappahamnock Estuary, Virginia, Kyeong Park and Albert Y. Kuo, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p461-474.
- Observations Related to the Use of the Sigma Coordinate Transformation for Estuarine and Coastal Modeling Studies, John F. Paul, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p336-350.
- On Some Hydrodynamic Effects Found in Large Scale Experiments, Nikolai S. Speranski, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), P785-793.
- Optimization of Freshwater Inflows to Lavaca-Tres Palacios, Texas, Estuary, Yixing Bao and Larry W. Mays, WR Mar./Apr. 94, p218-236.
- QUAL2E Simulations of Pulse Loads, Raymond Walton and Mary Webb, EE Sept./Oct. 94, p1017-1031.
- San Francisco Bay Test Case for 3-D Model Verification, Peter E. Smith, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p885-
- Scour Hole Depth Downstream of the SAF stilling Basin, M. Shafai-Bajestan, A. Sayahi and M. L. Albertson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1045-1049.
- The Significance of Hydrodynamic Forces in Coastal Embankment Design, Bang-Fuh Chen, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p880-889.
- Simulating Effects of Highway Embankments on Estuarine Circulation, Jonathan K. Lee, Raymond W. Schaffranek and Robert A. Baltzer, WW Mar./Apr. 94, p199-218.
- Solutions of Primitive Equations for Three-dimensional Tidal Circulation, Vincenzo Casulli and Ralph T. Cheng, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p396-
- The Swept Sine Wave Testing Technique in Hydrodynamic Applications, Nicholas Haritos, Okey Nwogu and Andrew M. Cornett, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p533-546.

Thermo-Hydrodynamic Modelling of the Chicago Sanitary and Ship Canal, Ejaz Mohammad and Forrest M. Holly, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1306-1310.

Three Dimensional Modelling of Estuarine Sediment Transport, A. Malcherek, C. LeNormant, E. Peltier, C. Teisson, M. Markofsky and W. Zielke, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p42-57.

A Three-Dimensional Numerical Simulation of Seasonal Flow and Salt Transport in the C&D Canal, Bernard B. Hsieh, David R. Richards and Jeff Gebert, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p595-599.

Tributary Loading with a Terrain Following Coordinate System, David P. Podber and Keith W. Bedford, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p475-488.

A Two-Dimensional Contaminant Transport Model with High-Resolution Upwind Schemes, Dihua Zhao, Jihn-Sung Lai and Hsieh Wen Shen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p135-139.

Two-Dimensional Simulation of Basin Irrigation. I: Theory, E. Playán, W. R. Walker and G. P. Merkley, IR Sept./Oct. 94, p837-856.

Two-Dimensional Simulation of Basin Irrigation. II: Applications, E. Playán, W. R. Walker and G. P. Merkley, IR

Sept./Oct. 94, p857-870.

The Use of Piezoelectric Film in Cavitation Research, Sau ray Paul, Christopher R. Ellis and Roger E. A. Arndt, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p454-471.

Variational Theories in Hydrodynamics and Hydraulics,

Chih Ted Yang, HY June 94, p737-756.

- Verification of the Shearstress Boundary Conditions in the Undertow Problem, Marcel J. F. Stive and Huib J. De Vriend, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p533-542.
- Vertical Sorting Within Dune Structure, Mohamed Abdel-Motaleb, (Fundamentals and Advancements in Hydrau-lic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p139-148.

Wave Interaction with Semiporous Cylindrical Breakwater, M. K. M. Darwiche, A. N. Williams and K.-H. Wang, WW July/Aug. 94, p382-403.

A Wind Driven Lake Circulation Finite Element Model for the Upper St. Marys River, E. M. Yuen and J. A. McCorquodale, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p584-588

Hydroelasticity

Composite 2D/3D Hydroelastic-Analysis Method for Floating Structures, Xiling Che, H. Ronald Riggs and R. Cengiz Ertekin, EM July 94, p1499-1520.

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Hydroelectric power

Innovative Instrumentation for a Physical Model of River Ice Transport, Johannes Larsen, Jon E. Zufelt and Randy D. Crissman, (Fundamentals and Advancements in Hy draulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p259-267.

Parametric Evaluation of Cross-Flow Turbine Performance, V. R. Desai and N. M. Aziz, EY Apr. 94, p17-34.

Refinement of Cross-Flow Turbine Design Parameters, Hara G. S. Totapally and Nadim M. Aziz, EY Dec. 94, p133-147.

Hydroelectric power generation

Deer Island Hydropower Plant Fueled By Wastewater, CE Mar. 94, p14.

- Design and Implementation of an Optimal Real-Time Hy-dropower Generation Scheduling System for the Lower Colorado River in Texas, Quentin W. Martin, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p169-
- Explicit Stochastic Modelling of a Reservoir for Hydropower Production, Slobodan P. Simonovic and Rangarajan Srinivasan, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p368-371.

Fish Passage/Protection: Big Costs, Little Data, CE June 94, p29.

Mapping 2-D and 3-D Velocity Components in Circular Conduits Using an Electromagnetic Current Meter and a 5-Hole Pilot Probe, Joseph J. Orlins and Lawrence J. Swenson, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p53-61.

Simulating Hourly Hydropower Operations for the Assessment of Environmental and Economic Impact, David A. Harpman, A. Spreck Rosekrans and Ronald E. Moulton, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

Technical Understanding in Successful Environmental Negotiations, Nina Burkardt, Berton L. Lamb and Terry J. Waddle, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p694-697.

Uncertainties in Flow Modeling and Forecasting for Niagara River, Randy D. Crissman, Chao-Lin Chiu, Weizu Yu, Kazumasa Mizumura and Ion Corbu, HY Nov. 93, p1231-1250.

Hydroelectric powerplants

Behavior of Cast-Iron Spillway Gate Wheels, Dimos Polyzois and Walter J. Muzyczka, MT Nov. 94, p495-512.

CAD for Small Hydro Projects, Norman A. Bishop, Jr., CE Apr. 94, p64-66.

Conjunctive Operation of Hydroelectric and Thermal Power Plants, Ricardo Harboe, Tirtha Raj Gautam and Pushpa Raj Onta, WR Nov./Dec. 94, p778-793.

Deer Island Hydropower Plant Fueled By Wastewater, CE Mar. 94, p14

Detecting Dam Failures, C. Michael Knarr, Thomas J. Barker and Stephen F. McKenery, CE June 94, p66-67.

Fish Entrainment and Strategies for Diversion, Andrew R. Blystra, Dennis J. McCauley and John E. Navarro, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p447-451.

Fishy Business, John Prendergast, CE Nov. 94, p60-63.

Hydro Plant Research Data Acquisition System, James E. Donegan, Julia Crittenden Tarbell and John F. Doyle, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p477-481.

Lessons Learned from the Design, Construction and Operation of Hydroelectric Facilities, Task Committee on Lessons Learned from the Design, Construction and Operation of Hydroelectric Facilities of the Hydropower Committee, Energy Division, ASCE, (Edward F. Carter, chmn.), 1994, 0-7844-0000-8, 105pp.

Minimizing the Probable Maximum Flood, Mark A. Woodbury, Douglas T. Eberlein and Nicholas Pansic, CE June 94, p64-65.

Nonlinear Stability of Differential Surge Chambers, Xiao-Liang Yang and Chen-Shan Kung, HY Nov. 92, p1526-

Pressure-Time Flow Rate in Low Head Hydro Plants, Charles W. Almquist, David B. Hansen, Gerald A. Schohl and Patrick A. March, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p445-453.

Strain Measurement on the Runner of a Hydroelectric Turbine, K. Warren Frizell, (Fundamentals and Advance-ments in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p416-424.

Testing Turbine Aeration for Dissolved Oxygen Enhance-ment, Tony L. Wahl, Jerry Miller and Doug Young, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p425-434.

Verification of Lake Superior Outflow Equations, Scott J. Thieme, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p462-

Water-Level Control in Hydropower Plants, Oscar F. Jiménez and M. Hanif Chaudhry, EY Dec. 92, p180-193.

Hydroelectric resources Fishy Business, John Prendergast, CE Nov. 94, p60-63.

Development of a Visual Method to Track the Movement of Hydrogen Bubbles in a Laboratory Flume, Athanasios N. Papanicolaou and Panayiotis Diplas, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p205-212. Helium-3 on the Moon: Model Assumptions and Abundan-

ces, Lawrence A. Taylor, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed.

and Stanley Lokaj, ed., 1994), p678-686.
Performance Assessment of the Copper/Steel Canister, Patrik Sellin, Torsten Eng and Lars Werme, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1020-1029.

Reservoir Estimates for the Sulpicius Gallus Region, Bonnie Cooper, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p889-896.

Hydrogen sulfide

The Use of Iron Salts to Control Dissolved Sulfide in Districts' Trunk Sewers, Navnit A. Padival, William A. Kimbell and John A. Redner, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p743-750.

Hydrogeology

Applications of Multi-mode Imaging to Multiple Offset VSP Data, A. H. Balch, Cemal Erdemir and Joseph P. Rousseau, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2797-2803.

Hydrographic surveys

Shoals System Capabilities for Hydrographic Surveying, J. L. Irish, W. J. Lillycrop, L. E. Parson and M. W. Brooks, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p314-321.

Vessel Positioning, Survey Controls and Dredge Monitor-ing Systems, George P. Bonner, Cary B. Cox, Barry W. McCleave and Monroe B. Savage, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p28-37.

Hydrographs

Comparison of Infiltration Equations Using Flooding Infiltrometer Data, David B. Thompson and Margaret Medellin, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1090-1094

Effects of Flow Duration on Local Scour at Bridge Piers in New York, Gerard K. Butch and Richard Lumia, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p46-50.

Heuristic Knowledge-base Approach to Runoff Estimation in Midwestern States Using a SCS Curve Number Method, Jaewan Yoon and G. Padmanabhan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p410-

Historical Rainfall-Runoff Analysis Using the Antecedent Precipitation Index, B. J. Doeing, R. A. Gaines and T. M. James, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1095-

Relationships between n-Day Flood Volumes for Infrequent Large Floods, James B. Balocki and Stephen J. Burges, WR Nov./Dec. 94, p794-818.

The Transport of Gravels in Boulder-Bed Streams, Alan F. Barta, Peter R. Wilcock and Conor C. C. Shea, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p780-784.

A Watershed Model for Estimating Suspended Sediment Hydrographs, Hafez Q. Shaheen, (Hydraulic Engineer-ing '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1176-1180.

Hydrologic aspects

Results of Prototype Borehole Instrumentation at the Hydrologic Research Facility, Area 25, NTS, Joseph P. Rousseau, Mark Kurzmack and Alison Greengard, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2764-

Hydrologic data

Impervious Cover Extraction Using Remote Sensing/GIS, Stuart B. Murchison, John M. Hunt and Steven C. Veal, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

Nonlinear Regression Applied to Hydrologic Data, Alexander C. Demetracopoulos, IR May/June 94, p652-659.

Paleoclimatic and Paleohydrologic Records From Secondary Calcite: Yucca Mountain, Nevada, Joseph F. Whelan, David T. Vaniman, John S. Stuckless and Richard J. Moscati, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2738-2745.

Hydrologic models

Addressing Central Valley Project Policy Issues Using a General-Purpose Model, Jean M. Boyer, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p509-512.

Arizona Groundwater Management Alternatives, James F. Booker, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p351-354.

de St-Venant Channel Routing in Distributed Watershed Modeling, Fred L. Ogden, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p492-496.

Economic Impacts of Severe and Sustained Drought, Robert A. Young, James F. Booker and Ari M. Michelsen, (Water Policy and Management: Solving the Prob-lems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p624-627.

The Effects of Spatial Resolution in Modeling the North Fork Drainage of the Gunnison River Basin, Leslie Frankoski, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p29-32

Efficacy of ARC/INFO GIS Application to Hydrologic Modeling, J. J. Warwick and S. J. Haness, WR May/June

94, p366-381.

Elmhurst Quarry Flood Control Project, Anthony J. Charl-ton, (Water Policy and Management: Solving the Prob-lems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p107-110.

Long Term Predictability of River Stages under ENSO Influence, Juan B. Valdés, Dara Entekhabi and Paolo Bartolini, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p366-

A model to describe the fate of agricultural pollutants, A. Pinheiro and B. Caussade, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p170-174.

Operational Interactive Hydrologic Forecasting with the National Weather Service River Forecast System, Donna Page and George F. Smith, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p1-4.

Precision of Evapotranspiration Estimates Using Neutron Probe, Osmar A. Carrijo and Richard H. Cuenca, IR

Nov./Dec. 92, p943-953.

A Predictive Hydrologic Model for Contaminant Leaching and Liner Effectiveness at Dredged Material Confined Disposal Facilities, Nadim M. Aziz, Paul R. Schroeder and Tommy E. Myers, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1507-1516.

Subrepository Scale Hydrothermal Analysis in Support of Total System Performance Assessment at Yucca Mountain, Srikanta Mishra, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1202-1213.

What is Computational Hydraulics? Angelos N. Findikakis, A. Blumberg, R. Schmalz and K. Bedford, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p482-486.

Hydrologic properties

Hydrologic Property Alterations Due to Elevated Temperatures at Yucca Mountain, A. L. Flint, M. H. Nash and M. S. Nash, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2101-2105.

- Algorithm for Precise Drainage-Basin Delineation, E. James Nelson, Norman L. Jones and A. Woodruff Miller, HY Mar. 94, p298-312.
- Analysis of Flow Along Anisotropic Fractures in Partially Saturated Media, J. S. Y. Wang and B. L. Cox, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1915-
- Atmospheric Circulation and Snowpack in the Gunnison River Basin, Gregory J. McCabe, Jr., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p481-484
- The Case for Retrievable High-Level Nuclear Waste Disposal, Eugene H. Roseboom, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1774-1781.
- Combination of an Automated Channel Network Extracting System and a Distributed Watershed Model in Estimation Rainfall-Runoff Processes, Ray-Shyan Wu, Yi-Shao Lai and Cheng-Hsung Liu, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p356-360.
- Comparison Coupled Thermal-Mechanical-Hydrological Analysis of a Fractured Rock Mass, M. P. Ahola, A. H. Chowdhury, S. M. Hsiung and J. Philip, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2492-2499.
- Comparison of Infiltration Equations Using Flooding Infiltrometer Data, David B. Thompson and Margaret Medellin, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1090-1094.
- Computer Model for Infiltration System Design, Thomas N. Debo, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p241-248.
- A Decision Support System for Nonpoint Source Pollution Management Using a Distributed Model-GIS-DBMS Linkage, Jaewan Yoon and G. Padmanabhan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p402-409.
- Density-dependent Circulation in Desert-basin Aquifers with Isotropic Self-Similar Permeability Distributions, Gilberto E. Urroz and Daoqiong Yang, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p87-91.
- Development and Application of Long Range Study (LRS) Model for Missouri River System, George A. Patenode and Karen L. Wilson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p677-680.
- Development of Environmental Impacts Model for Missouri River System, Robert Loveless and Ray Walton, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),
- Effects of Global Warming on Hurricane-Induced Flood-ing, William J. Gutowski, George F. McMahon, Shing S. Schluchter and Paul H. Kirshen, WR Mar./Apr. 94,

Estimating Two-Phase Hydraulic Properties by Inverse Modeling, Stefan Finsterle and Karsten Pruess, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2160-

Evaluation of Six Methods for the LP3 Distribution, Fang Xin Yu and Babak Naghavi, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p1080-1084.

Evaluation of Thermo-Hydrological Performance in Sup-port of the Thermal Loading Systems Study, Thomas A. Buscheck, John J. Nitao and Steven F. Saterlie, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p592-610.

Evaporation and Evapotranspiration under Climate Change in New England, Neil M. Fennessey and Paul H.

Kirshen, WR Jan./Feb. 94, p48-69.

Farakka Barrage - It's Impacts and Possible Mitigation, M. Asafuddowlah and Sufian A. Khondker, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p120-124.

Rumer, ed., 1994), p120-124.
Flow-Duration Curves 1: New Interpretation and Confidence Intervals, Richard M. Vogel and Neil M. Fennessey, WR July/Aug. 94, p485-504.
Following the Geotechnical Studies of the West-Breakwater at Sines; Hydro-Geotechnical Stability of Breakwater Engage B. I. Benerot, and Joek Heapway. Breakwaters, Frans B. J. Barends and Jack Hagenaar, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p124-167.
General Urban Runoff Model for Water Quality Investiga-

tions, Robert E. Pitt, (Hydraulic Engineering George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p1213-1218.

GIS-Based Channel Extraction and Smoothing Algorithm for Distributed Hydrologic Modeling, Fred L. Ogden, Bahram Saghafian and Witold F. Krajewski, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p237-241.

Groundwater Development and Related Issues, Abdul Han-

nan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p308-311.

HEC River Analysis System (HEC-RAS), Vernon Bonner, Gary Brunner and Mark Jensen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p376-380.

Hydraulic Conditions Required to Move Unanchored Resi-

Hydraulic Conditions Required to Move Unanchored Residue Materials, J. E. Gilley, E. R. Kottwitz and G. A. Wieman, IR May/June 94, p591-606.
Hydraulic Engineering '94, 2 vols, ISSN: 1070-1559, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994, 0-7844-0037-7, 1375pp.
Hydraulics and Hydrology for the User, Randel L. Dymond, CC May 94, p1,12-14.
Hydrodiplomacy on Forester Creek, Lisa T. M. Vomerphouve, Water Policy and Management. Solving the

Inouye, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p557-560.

Hydrologic Property Alterations Due to Elevated Tempera tures at Yucca Mountain, A. L. Flint, M. H. Nash and M. S. Nash, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p2101-2105.

The Impact of Buoyant, Gas-Phase Flow and Heterogeneity on Thermo-Hydrological Behavior at Yucca Mountain, Thomas A. Buscheck and John J. Nitao, (High Level Radioactive Waste Management, High Level Ra-dioactive Waste Program Committee, 1994), p2450-2474

Improved Interpretation of Hvorslev Tests, Z. Demir and T. N. Narasimhan, HY Apr. 94, p477-494.

Instream Flow Policy: An Alternative to Minimum Flowby, Donald R. Jackson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry

Solving Inte Problems, Datterli O. Pontane, ed. and Harry N. Tuvel, ed., 1994), p222-225.
Integrating Scientific Results for a Post-Closure Safety Demonstration, Edward C. Taylor, Lawrence D. Ram-spott, Scott Sinnock and William M. Sprecher, (High Level Radioactive Waste Management, High Level Ra-dioactive Waste Program Committee, 1994), p301-305.

Intelligent Design and Remediation of Shallow Landfill Burial Systems, James C. Ascough, II, Leonard J. Lane and Thomas E. Hakonson, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p257-264.

An Interactive Regional Regression Approach to Estimating Flood Quantiles, Gary D. Tasker and Raymond M. Slade, Jr., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel,

ed., 1994), p782-785.

Isotopic Studies of Yucca Mountain Soil Fluids and Car-bonate Pedogenesis, Ted A. McConnaughey, Joseph F. Whelan, Kimberley P. Wickland and Richard J. Moscati, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2584-2589.

Joint Probability Distribution of Rainfall Intensity and Du-ration, G. V. Loganathan and Glenda Patron, (Water Policy and Management: Solving the Problems, Darrell Fontane, ed. and Harry N. Tuvel, ed., 1994), p193-196

Late Glacial Climate Estimates for Southern Nevada the Ostrocode Fossil Record, Richard M. Forester and Alison J. Smith, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2553-2561.

Long-Term Simulation of Decreased Acid Loading on For-ested Watershed, Todd H. Rees and Jerald L. Schnoor,

EE Mar./Apr. 94, p291-312

Mixed-Layer Hydrothermal Reservoir Model, Poshu Huang, Joseph L. DiLorenzo and Tavit O. Najarian, HY

July 94, p846-862.

Modeling Hydrologic and Pollutant Transport Processes for Stromwater Runoff to Surface Waters, Leslie L. Shoemaker, Mohammed Lahlou, Andrew Stoddard and James Pagenkopf, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1208-1212.

Multi-Reservoir System Simulation Design Using C++ and Object Oriented Programming, Jesse Perla and K. Ponnambalam, (Hydraulic Engineering '94, George Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1030-

Natural Analogues and Performance Assessment, Paul L. Cloke, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1329-1336.

Performance Assessment Model of a Single Waste Package, William J. O'Connell, Tzou-Shin Ueng and Lynn C. Lewis, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1188-1194.

Predicting Hydrologic Impacts of a Severe and Sustained Drought on the Colorado River Basin, Taiye B. Sangoyomi and Benjamin L. Harding, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed.

and Harry N. Tuvel, ed., 1994), p616-619.

PROSIM - A Water Rights-Based Operational Simulation Model of the Provo River, Steven M. Thurin, Paul C. Summers and P. Kirt Carpenter, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p578-581.

Real-Time Flood Forecasting Using Adaptive Estimation, Dong Kug Jeong and Ben Chie Yen, (Hydraulic Engi-neering '94, George V. Cotroneo, ed. and Ralph R. Ru-mer, ed., 1994), p341-345.

Relation Between Largest Known Flood Discharge and El-evation in Montana, Charles Parrett and Stephen R. Holnbeck, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p870-874

Shallow Infiltration Processes in Arid Watersheds at Yucca Mountain, Nevada, Lorraine E. Flint, Alan L. Flint and Joseph A. Hevesi, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2315-2322.

Spatial Disaggregation for Studies of Climatic Hydrologic Sensitivity, Daniel Epstein and Jorge A. Ramírez, HY Dec. 94, p1449-1467.

Spatial Distribution of Potential Near Surface Moisture Flux at Yucca Mountain, Alan L. Flint and Lorraine E. Flint, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2352-2358.

Station-Year Approach: Tool for Estimation of Design Floods, Henri Garros-Berthet, WR Mar./Apr. 94, p135-

Testing Conceptual Unsaturated Zone Flow Models for Yucca Mountain, Tim P. Brown, Linda L. Lehman and John L. Nieber, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Commit-

tee, 1994), p1999-2006.

The Testing of Thermal-Mechanical-Hydrological-Chemical Processes Using a Large Block, W. Lin, D. G. Wilder, J. A. Blink, S. C. Blair, T. A. Buscheck, D. A. Chesnut, W. E. Glassley, K. Lee and J. J. Roberts, (High Level Radioactive Waste Management, High Level Ra-dioactive Waste Program Committee, 1994), p1938-

Transmission Losses from Ephemeral Stream in Arid Region, Mohamed J. Abdulrazzak and Ali U. Sorman, IR

May/June 94, p669-675.

Two-Dimensional Water Flood and Mudflow Simulation, J. S. O'Brien, P. Y. Julien and W. T. Fullerton, HY Feb. 93, p244-261.

Water Balance of Blue Nile River Basin in Ethiopia, Peggy A. Johnson and P. Douglas Curtis, IR May/June 94, p573-590.

Hydrostatic pressure
Considerations in 2-D Modeling of Hydraulically Steep
Flow, R. C. Berger and R. L. Stockstill, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1285-1289.

Design, Construction, and Maintenance of Relief Wells, US Army Corps of Engineers, 1993, 0-87262-955-4,

90pp.

Heterogeneous Hardening Plasticity Model for Concrete, H. C. Chan, Y. K. Cheung and Y. P. Huang, ST Jan. 94,

Hydrostatic Pressure Loading due to Ice Formation in Manholes, S. Tanary, A. Fahim and M. Munro, CR Dec. 94, p121-132.

Hydrostatic tests

Improving the Pipeline Hydrostatic Leak Test Model, Rodney F. Wedge, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p182-205.

Settlement of Tanks on Clay, J. Michael Duncan, Timothy B. D'Orazio and Phil Myers, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p92-106.

Hyetographs

Constant Time Interval Hortonian Infiltration Model, Jin Lee and Katumi Musiake, IR Mar./Apr. 94, p250-265.

Algorithm for Hysteresis Analysis of Prestressed-Concrete Frames, Xiaozu Su and Bolong Zhu, ST June 94, p1732-1744.

Frequency Analysis in Stochastic Linearization, F. Casciati,

L. Faravelli and P. Venini, EM Dec. 94, p2498-2518. Multiaxial Cyclic Plasticity Model for Clays, Ronaldo I. Borja and Alexander P. Amies, GT June 94, p1051-

Seismic Damage-Control Design of Gypsum-Roof Diaphragms, Sashi K. Kunnath, Mehrdad Mehrain and William E. Gates, ST Jan. 94, p120-138.

Hysteresis models

Developing Retrofit Strategies for the China Basin Viaduct Foundations Using Non-linear, Hysteretic Analysis, D. R. Parker, John C. Castro and R. A. Dameron, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1839-1845.

Equivalent Frame Analysis of Flat Plate Buildings for Seismic Loading, Y. H. Luo, A. J. Durrani and J. P. Conte, ST July 94, p2137-2155.

Hysteretic systems

Control of Hysteretic System Using Velocity and Accelera-tion Feedbacks, J. N. Yang, Z. Li and S. C. Liu, EM Nov. 92, p2227-2245.

Discontinuous Control of Seismic-Excited Nonlinear and Hysteretic Structures, J. N. Yang, Z. Li and J. C. Wu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p393-398.

Statistical Response of a Class of Hysteretic Systems, I. I. Orabi and G. Ahmadi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p405-410.

Steady-State Oscillation of Hysteretic Differential Model. I: Response Analysis, C. W. Wong, Y. Q. Ni and S. L. Lau, EM Nov. 94, p2271-2298.

Steady-State Oscillation of Hysteretic Differential Model. II: Performance Analysis, C. W. Wong, Y. Q. Ni and J. M. Ko, EM Nov. 94, p2299-2325.

Analysis of I-Girder Highway Bridges, Kassim M. Tarhini, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p684-687.

Beam-Buckling Analysis via Automated Rayleigh-Ritz Method, C. M. Wang, L. Wang and K. K. Ang, ST Jan.

94, p200-211.

Externally Stiffened I-Beam to Box-Column Connections, N. E. Shanmugam, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p719-724.

Inelastic Bending and Torsion of Steel I-Beams, Yong Lin Pi and N. S. Trahair, ST Dec. 94, p3397-3417.

Design and Testing of Two Ice-Preserving Winter Lake Aeration Systems, Christopher R. Ellis and Heinz G. Stefan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1326-

Effects of Simulated Ice on the Performance of Price Type-AA Current Meter Rotors, Janice M. Fulford, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed.,

1994), p251-258.

Environment-Friendly Deicing/Anti-Icing Fluid, Len Haslim and John Zuk, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p137-139.

Finite-Element Simulation of Ice-Sheet Indentation, H. A. Khoo and T. M. Hrudey, EM June 94, p1322-1342

Penetration Fracture of Sea Ice Plate: Simplified Analysis and Size Effect, Zdeněk P. Bažant and Yuan-Neng Li, EM June 94, p1304-1321.

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Estimation of Mean Velocity for Flow Under Ice Cover, Martin J. Teal and Robert Ettema, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p242-250.

Innovative Instrumentation for a Physical Model of River Ice Transport, Johannes Larsen, Jon E. Zufelt and Randy D. Crissman, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p259-267.

Methods for Measuring Discharge under Ice Cover, John F. Walker, HY Nov. 94, p1327-1336.

Wave Propagation in Ice-Covered Channels, Steven F. Daly, HY Aug. 93, p895-910.

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Ice Accumulation Rate and the Geometry of Ice Jams in River Bends, Gilberto E. Urroz and Robert Ettema, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p386-390. Innovative Instrumentation for a Physical Model of River Ice Transport, Johannes Larsen, Jon E. Zufelt and Randy D. Crissman, (Fundamentals and Advancements in Hy draulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p259-267.

Estimation of Mean Velocity for Flow Under Ice Cover, Martin J. Teal and Robert Ettema, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p242-250.

Harbor and Marina Improvements McKinley Marina Mil-waukee, Wisconsin, Greg High and Dave Werren, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p489-498.

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Ice Accumulation Rate and the Geometry of Ice Jams in River Bends, Gilberto E. Urroz and Robert Ettema, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p386-390.

The Regulation of Lake Ontario During the Spring of 1993; a Period of Record Supplies, Anthony J. Eberhardt and Peter P. Yee, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p187-191.

Sedimentation and Remediation Aspects of Recreation Lakes, Satya Vasireddy, Ashok Medhi and Anand Prakash, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1136-1140.

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Transient Response of Guyed Telecommunication Towers Subjected to Cable Ice-Shedding, Ghyslaine McClure and Na Lin, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p801-809.

Penetration Fracture of Ice Plate: 2D Analysis and Size Effect, Yuan-Neng Li and Zdeněk P. Bažant, EM July 94, p1481-1498.

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Immobilizing the Calcined High Level Waste in Glass and Crystalline Phases, S. V. Raman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1124-1130.

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Development of an Expert System to Identify Hazardous Highway Spots, Joseph E. Hummer and Paul R. Sloup, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p333-340.

Earthquake Response of Flat-Slab Buildings, Ahmad J. Durrani, S. T. Mau, Amr Ahmed AbouHashish and Yi Li, ST Mar. 94, p947-964.

Element Identification of Member Properties of Framed Structures, Andres W. C. Oreta and Tada-aki Tanabe, ST July 94, p1961-1976.

Element-Level System Identification with Unknown Input, Duan Wang and Achintya Haldar, EM Jan. 94, p159-

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Identification of Aeroelastic Parameters of Flexible Bridg-es, Partha P. Sarkar, Nicholas P. Jones and Robert H.

Scanlan, EM Aug. 94, p1718-1742. Parameter Estimation of Structures from Static Response.

II: Numerical Simulation Studies, M. R. Banan, M. R. Banan and K. D. Hjelmstad, ST Nov. 94, p3259-3283. Parameter Estimation of Structures from Static Response. I: Computational Aspects, M. R. Banan, M. R. Banan and K. D. Hjelmstad, ST Nov. 94, p3243-3258.

Review of Advanced Techniques for Waste Canister Labeling, William G. Culbreth, Bharani Kumar Bhagi and Anand Kanjerla, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1791-1795.

Shear Failure of Concrete Beams Reinforced with Plates, M. Arduini, A. D'Ambrisi and A. Di Tommaso, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p123-130.

Story-Drift, Shear, and OTM Estimation from Building Seismic Records, S. T. Mau and V. Aruna, ST Nov. 94, p3366-3385.

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Vibration Testing for Nondestructive Evaluation of Bridges. II: Results, Mahmod M. Samman and Mrinmay Biswas, ST Jan. 94, p290-306.

1993 Ground-Water Flooding in the Havana Area, Adrian P. Visocky, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p608-

Celebrating Engineers Week, Chicago-Style, CE May 94, p74.

Construction of the Clark Cable-Stayed Bridge at Alton, Illinois, David Goodyear and Ralph Salamie, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p672-676.

Historical Trends in Flood Discharges on the Upper Missis-sippi River, H. Vernon Knapp, (*Hydraulic Engineering* '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), 9618-622.

Illinois Rehabs Rural Highways the Smart Way, CE May 94, p20,22.

Impacts of the 1993 Flood on the Mississippi River in Illinois, Nani G. Bhowmik, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p613-617.

Let's Keep this Private, CE Sept. 94, p8.

The New Clark Bridge: Saddle-Draped Cables, David Goodyear and Ralph Salamie, CE Aug. 94, p46-49.

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Image analysis

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Automated Crack Identification for Cement Paste, D. Darwln, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p613.

Characterisation of Anhydrous Cement Clinker by Backscattered Electron Imaging and Energy Dispersive X-Ray Analysis, K. L. Scrivener, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p79-81.

Coherent Structures in Compound Open-Channel Flows by Making Use of Particle-Tracking Visualization Technique, Iehisa Nezu, Hiroji Nakagawa and Ken-ichi Saeki, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p406-415.

Computer Vision System for Automatic Vehicle Classification, Xidong Yuan, Yean-Jye Lu and Semaan Sarraf, TE Nov/Dec. 94, p861-876.

Development of a Visual Method to Track the Movement of Hydrogen Bubbles in a Laboratory Flume, Athanasios N. Papanicolaou and Panayiotis Diplas, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p205-212.

Experimental Design and Measurement Techniques for Investigation of Two-Phase Flow, Andreas J. Kuck, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p86-93.

Image Analysis of Surf Zone Hydrodynamics, J. M. Redondo, A. Rodriguez, E. Bahia, A. Falqués, V. Gracia, A. Sánchez-Arcilla and M. J. F. Süve, (*Coastal Dynamics '94*, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p350-365.

Image-Based Expert-System Approach to Distress Detection on CRC Pavement, Stephen Tsao, Nasser Kehtamavaz, Paul Chan and Robert Lytton, TE Jan./Feb. 94,

An Infrastructure Records Management System Using PCbased Image Scanning Technology, Stephen M. Benz, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1806-1811.

Low Frequency Radio Astronomy from Earth or Lunar Orbit, Jack O. Burns, John P. Basart and Bernard M. McCune, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1400-1409.

Mapping Fractures Using Fresnel Volume Tomography, D. W. Vasco, John E. Peterson, Jr. and E. L. Majer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2648-2654.

Microstructure, Image Analysis, and Fly Ash in Hardened Cement Paste, Sidney Diamond, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p337.

Money-Saving Model, Carson Mettel, David McGraw and Susanne Strater, CE Jan. 94, p54-56

New Crack-Imaging Procedure Using Spatial Autocorrelation Function, H. Lee and H. Oshima, TE Mar./Apr. 94,

Onboard Image Processing With Transputers, András Balázs, József Biró and Sándor Szalai, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1323-

Optical Remote Sensing of Wave Surface Kinematics, Stephen Riedl, Richard Seymour and Jun Zhang, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p943-950.

Range Determination Using Target Images, Fouad A. Ahmed, SU Nov. 94, p135-144.

Simple Procedure for Identifying Pavement Distresses from Video Images, Koon Meng Chua and Ling Xu, TE May/June 94, p412-431.

Images

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Chloride Diffusivity Computation for Cement Paste, E. J. Garboczi and D. P. Bentz, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p159-173.

Comparison of Traditional and Neural Classifiers for Pavement-Crack Detection, Mohamed S. Kaseko, Zhen-Ping Lo and Stephen G. Ritchie, TE July/Aug. 94, p552-569 Let's Go to the Videotape, Paul Tarricone, CE June 94,

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Range Determination Using Target Images, Fouad A. Ahmed, SU Nov. 94, p135-144.

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Assessing Stormwater Impacts, G. Allen Burton, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1198-1202.

Bridge Rail Impact Forcing Functions, Barry T. Rosson and Ronald K. Faller, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p91-96.

Coastal and Oceanographic Impact of Hurricane Andrew, Hsiang Wang and Lihwa Lin, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p791-798.

Comment on Global/Local Method for Low-Velocity Impact Problems, Minggang Zhou and William P. Schonberg, EM May 94, p1042-1056.

Cumulative Impact of Heavy Permit-Trucks on Steel Bridges, Michel Bruneau and Murat Dicleli, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p97-102.

Damage to Highway Infrastructure 1993 Mississippi River Basin Flooding, A. C. Parola, T. E. Fenske and D. J. Hagerty, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p26-30.

Distributional Information for Ejection Fragments, Eric P. Steinberg, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p402-413.

Dust Levitation on the Moon, Frederick A. Slane, Nebojsa Duric and Jack O. Burns, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p897-906.

Dynamic Loading of a Rigid Frame Bridge, Dongzhou Huang, Ton-Lo Wang and Mohsen Shahawy, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p85-90.

Ground Motions and Air-Blast Effects of Explosive Demolition of Structures, Charles H. Dowding, CO Dec. 94, p838-856.

The Human Impact of Hurricane Iniki, James K. Mitchell, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p259-267.

Impact and Flexure Properties of Glass/Vinyl Ester Composites in Cold Regions, Vistasp M. Karbhari and Gregory Pope, CR Mar. 94, p1-20.

Impact Hydraulic Jump, Willi H. Hager, HY May 94, p633-637.

Implementation of a Viscoplastic, Kinematic Hardening Constitutive Model for Impact Prediction, Jeffrey R. Sachs, Charles S. White and Frederick C. Taverner, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994),

The LEO Particulate Environment as Determined by LDEF, Thomas H. See, Michael E. Zolensky, Friedrich Hörz, Ronald P. Bernhard, Kimberly S. Leago, Jack L. Warren, Clyde A. Sapp, Tammy R. Foster and William H. Kinard, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p618-627.

Optical Scatter From a Space Craft Mirror Due to Micro-Construction, and Operations in Space IV, Rodney G, Galloway, ed. and Stanley Loka, ed., 1994b, p368-377.

Overview of Space Environmental Effects, Alan J. Watts,

(Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed.,

1994), p628-637 Space Debris, Ankur Gupta, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed.

and Stanley Lokaj, ed., 1994), p820-825. Spacecraft Wall Design for Orbital Debris Impact, Shyh-Rong Tzan and Chris P. Pantelides, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p378-387.
Test and Evaluation Criteria for Side-Impact Roadside Ap-

purtenance Collisions, M. H. Ray and J. F. Carney, III,

TE July/Aug. 94, p633-651.

Deepwater Waves and Tsnami Produced by the Impacts of Small Asteroids", J. G. Hills, (Engineering, Construc-tion, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1365-1371.

Impact forces

Damage Containment and Residual Strength of Composite Laminates, C. S. Chu, AS Apr. 94, p240-243.

Dynamic Response of Fibre-Reinforced Composite Plates Under Distributed Impact Loads, R. K. Mittal and M. R. Khalili, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p94-109.

Implications of Theories of Asteroid and Comet Impact for Policy Options for Management of Spent Nuclear Fuel and High-Level Radioactive Wastes, Newell J. Trask, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1324-1328.

Severity Measures in Side-Impacts with Narrow Roadside Structures, M. H. Ray, J. F. Carney, III, M. I. Faramawi and L. A. Troxel, TE Mar./Apr. 94, p322-338.

Shelters for Hurricane Refuge, Herbert S. Saffir, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p241-248.

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Impact Factors for Simple-Span Highway Girder Bridges, Dongil Chang and Heehyun Lee, ST Mar. 94, p704-715. Integrated Analytical Procedure for Concrete Slabs Under Impact Loads, Ayaho Miyamoto, Michael William King

and Manabu Fujii, ST June 94, p1685-1702. Scale Effect on Impulsive Wave Forces and Reduction by Submerged Breakwater, Tsutomu Sakakiyama and Masaharu Ogasawara, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C.

Kraus, ed., 1994), p628-641.

Study on Reinforced Concrete Cylindrical Shells with Edge Members under Impact Loading, Kazuhiko Mashita, Hidehiro Yoshitake, Masaya Noguchi and Masatoshi Hotta, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p847-856.

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Flexural Behavior of Simcon, David J. Akers and Ziad Bayasi, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p375-379.

Impulsive Punching of Fiber-Reinforced Concrete Slabs, Pietro G. Gambarova and Cristiano Schumm, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p252-257.

Modal Identification of Cable-Stayed Pedestrian Bridge, Mack G. Gardner-Morse and Dryver R. Huston, ST Nov.

93, p3384-3404.

Modeling Impact of Armour Blocks, M. A. G. Silva, (Reconstruction of the West Breakwater at Port Sines, Por-tugal, Rubble Mound Structures Committee of the Wa-terway, Port, Coastal, and Ocean Division of ASCE, 1994), p187-204. Physical Model Tests of Dolos Impact Stresses, J. M. Stallings and J. W. Tedesco, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p67-72.

Verification Testing of Multi-Purpose Rail Cask Impact Limiters, Charles J. Temus, Ian D. McInnes, Ken Miller and Robert A. Johnson, (*High Level Radioactive Waste Management*, High Level Radioactive Waste Program Committee, 1994), p452-456.

Impacts

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Impedance

- Acoustic Impedance for Assessing Subbottom Conditions, Robert F. Ballard, Jr. and Richard G. McGee, (*Dredging* '94, E. Clark McNair, Jr., ed., 1994), p249-258.
- Effect of Flexibility on Impedance Functions for Circular Foundation, Gin-Show Liou and Pao-Han Huang, EM July 94, p1429-1446.
- Generalized Object Control and Assembly for Space Robots, Jeff Russakow and Stephen Rock, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p149-157.
- A Piezoelectric Sediment Density Probe, I. R. McDermott, A. D. King and S. J. Smyth, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p239-248.

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- SI the Hard Way, NE Aug. 94, p14.
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- Stratified Flow in an Impounded Inland River, Emmet M. Owens and William R. Naumann, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p569-573.

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- The Behavior of P. Building with Shallow Foundations on a Stiff Lateritic Clay, Luciano Décourt, (Vertical and Horicontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1505-1515.
- Collecting Sediment Environmental and Geotechnical Data Using an Impact Core Sampler, James M. Schmidt, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p279-287.
- Compressibility of Clays: Fundamental and Practical Aspects, Serge Leroueil, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p57-76.

- Consolidation Characteristics of an Offshore Clay Deposit, J. A. R. Ortigao and A. S. F. J. Sayao, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), pl415-1424.
- Design and Installation of a New Settlement-Inclinometer Device, R. G. Campanella, R. S. Jackson, J. A. R. Ortigao and C. B. Crawford, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994, p911–994.
- Distress in Prestressed Concrete Roof Girders at a Cement Plant, W. P. S. Dias, A. D. C. Jayanandana, M. C. M. Fonseka and A. A. D. A. J. Perera, CF Feb. 94, p6-15.
- Dynamic Properties of Gravel Layers Investigated by In-Situ Freezing Sampling, Takeji Kokusho and Yukihisa Tanaka, Ground Faillures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p121-140.
- Dynamic Properties of Gravels Sampled by Ground Freezing, Shigeru Goto, Shin'ya Nishio and Yoshiaki Yoshimi, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p141-157.
- Evaluation of a 6-Wire Thermocouple Psychrometer for Determination of In-Situ Water Potentials, Carole L. Loskot, Joseph P. Rousseau and Mark A. Kurzmack, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2084-2091.
- Gas in Soil I: Detection and η-Profiling, Nader S. Rad and Tom Lunne, GT Apr. 94, p697-715.

 Hydraulic Conductivity of Compacted Clay Frozen and
- Hydraulic Conductivity of Compacted Clay Frozen and Thawed in Situ, Craig H. Benson and Majdi A. Othman, GT Feb. 93, p276-294.
- Identification and Characterization of Collapsible Gravels, Kyle M. Rollins, Ralph L. Rollins, Trevor D. Smith and George H. Beckwith, GT Mar. 94, p528-542.
- In Situ Stress Determination Research Study, William G. Austin and Paul M. Thompson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2429-2436.
- In-Situ Nondestructive Testing of Buried Precast Concrete Pipe, Dennis A. Sack and Larry D. Olson, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p499-507.
- Prediction of Settlement of Spread Footings, Luciano Décourt, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p210-213.
- Prediction of Shallow Foundation Settlement on Sand, Mazen E. Adib and Ramin Golesorkhi, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p228-231.
- Sediment Transport Under Wave-Current Interaction on Macro-Tidal Beaches, Franck Levoy, Olivier Monfort and Hélène Rousset, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p727-741.
- Site Investigation Surveys for Dredging Projects, S. J. Plasman and J. Peuchen, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p322-331.
- M., Goding Prediction Event, Ching L. Kuo and Sayed M. Sayed, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p219-223.
- T-Bar Penetration Testing in Soft Clay, D. P. Stewart and M. F. Randolph, GT Dec. 94, p2230-2235.
- Test and Prediction Results for Five Spread Footings on Sand, Jean-Louis Briaud and Robert M. Gibbens, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1897-1898.
- Ultrasonic Rock Fracture Characterization, G. Danko, G. Zhan, Cs. Mezei, J. Daemen and P. Mousset-Jones, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2789-2796.
- Wave Equation Parameters from Driven-Rod Test, Robert Y. Liang and Yuanjing Sheng, GT June 93, p1037-1057.

Incentives

Agriculture and Soil Conservation, Billy M. Teels, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p211-218

Breakout Session 2C: Market-Based Incentives, Kiran Bhatt, Donna Boyson, Sonia Hamel and Clarisse Lula, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p145-146.

Wholly, ed., 1994), p143-140. Strategies for Increasing Bicycle and Pedestrian Safety and Use, Brian L. Bowman, Robert L. Vecellio and David W. Haynes, UP Sept. 94, p105-114.

Incineration

Beneficial Use of Ash: An Innovative Approach to Sludge Management, Michael E. Manning, John R. Amend and Mark K. Ballerstein, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p146-153.

Meeting 503 Regulations for Ten Biosolids Incinerators (And Associated Stories), Mark Prentice, Norman LeBlanc, Thomas E. Sadick and F. Michael Lewis, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p114-121.

Incinerators

Clearing the Air About Sludge Incinerator Emissions, Phil-lip M. Martin, Eugene W. Waltz and Richard D. Kuchenrither, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p122-128.

Design Optimization of Coventry Municipal Solid Waste Incinerator, V. Nasserzadeh, J. Swithenbank, C. Schofield, D. W. Scott, A. Loader and A. Leonard, EE

Nov./Dec. 94, p1615-1629.

Incineratior Emissions Monitor Offers Air-Compliance Proof, ET Aug./Sept. 94, p7.

Incipient motion

Determination of Geometry and Stress Distribution of an Optimal Stable Channel, Gregorio G. Vigilar, Jr. and Panayiotis Diplas, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p959-963

Fluvial Hydraulics of Streams and Mountain Rivers with Mobile Bed, Wojciech Bartnik and Alicja Michalik, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p767-771.

Scour Hole Depth Downstream of the SAF stilling Basin, M. Shafai-Bajestan, A. Sayahi and M. L. Albertson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1045-1049.

Huid Inclusion Studies of Calcite Veins from Yucca Mountain, Nevada, Tuffs: Environment of Formation, Edwin Roedder, Joseph F. Whelan and David T. Vaniman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1854-1860.

Preliminary Investigation Results as Applied to Utilization of Ukrainian Salt Formations for Disposal of High-Level Radioactive Waste, Stella B. Shekhunova, Oleg I. Petri-chenko and Dmitry P. Khrushchov, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p1880-1885.

India

Characteristics of Trips by Foot and Bicycle Modes in Indian City, V. Thamizh Arasan, V. R. Rengaraju and K. V. Krishna Rao, TE Mar./Apr. 94, p283-294.

Effects on River Mechanics Due to Reduction in Low-Season Discharge, E. V. Richardson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p115-119.

Environmental Technology Management of the Cement In-dustry in India and Neighbouring Countries, A. K. Chat-terjee, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p438-480.

Farakka Barrage - It's Impacts and Possible Mitigation, M. Asafuddowlah and Sufian A. Khondker, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p120-124. Quick Response to India Earthquake by ASCE Section, CE Feb. 94, p68.

Satellite Observations of Wave Heights in Arabian Sea and Bay of Bengal, Usha Natesan and S. P. Subramanian, WW Nov./Dec. 94, p576-579.

Indian reservations

Decision Aids for Enhancing Intergovernmental Interac-The Prenotification Analysis Support System (PASS), Marcus Lester, Edward Liebow and Judith Holm, (High Level Radioactive Waste Management. High Level Radioactive Waste Program Committee, 1994), p168-175.

Environmental Justice: Implications for Siting of Federal Radioactive Waste Management Facilities, J. Bennett Easterling and James S. Poles, (*High Level Radioactive* Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p63-67.

Expected Reaction to Various Options for Spent-Fuel Storage, John Richardson, Christopher Charles and Ausra M. Richards, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p98-103.

Monitored Retrievable Storage: A Test of Cultural Values and A Symbol of Tribal Sovereignty, W. A. White-Tail Feather, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p68-75.

Preliminary Assessment of Potential Sites for a Monitored Retrievable Storage (MRS) Facility, Lois S. Smith, Thomas H. Rogers, Arthur Dailey and Jeffrey R. Williams, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1372-1379.

Fish Passage/Protection: Big Costs, Little Data, CE June 94, p29.

Indonesia

Governmental Priorities in Irrigation Project Selection in Indonesia, Sutardi and I. C. Goulter, WR May/June 93,

Station-Year Approach: Tool for Estimation of Design Floods, Henri Garros-Berthet, WR Mar./Apr. 94, p135-

Indoor air pollution

Contribution of Waterborne Radon to Home Air Quality, Arun K. Deb, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p662-669.

Industrial plants

Industrial Facility Quality Perspectives in Owner Organizations, Kelly Jean Fergusson and Paul Teicholz, CF May 94, p89-109.

Redesigning Job Site Planning Systems, Glenn Ballard, Gregory Howell and Saied Kartam, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1564-1574

Storm Water Pollution Control for Industry: Developing Effective Guidelines Through Public Involvement, L. Donald Duke, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p517-520.

Transport Infrastructure Choices for Industrial Cis-lunar Traffic, John Sved, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p587-596.

Waste Minimization and Recycling by Microfiltration dur-ing Nitrocellulose Manufacturing, Lee Clapp, Jae K. Park and Byung J. Kim, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p98-105.

Wind Forces on Industrial Facilities, Joseph A. Bohinsky and Hikmat E. Zerbe, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1036-1041.

Industrial wastes

Identifying Promising Pollution-Prevention Technologies, James D. Englehardt, EE May/June 94, p513-526.

Investigation of Dry-Weather Pollutant Entries Into Storm-Drainage Systems, Richard Field, Robert Pitt, Melinda Lalor, Michael Brown, William Vilkelis and Edward Phackston, EE Sept./Oct. 94, p1044-1066.

NPDES Storm Water Permit Compliance at Air Force In-stallations, Paul Makowski and Marvin Smith, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1224-1228.

Predicting the Impact from Significant Storm Events on a Hazardous Waste Site, Udai P. Singh, Nea! P. Dixon and J. Stephen Mitchell, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p772-780.

Treatment of Metal Industrial Wastewater by Fly Ash and Cement Fixation, C. H. Weng and C. P. Huang, EE

Nov./Dec. 94, p1470-1487.

The Use of Iron Salts to Control Dissolved Sulfide in Districts' Trunk Sewers, Navnit A. Padival, William A. Kimbell and John A. Redner, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p743-750.

The Use of Secondary Products in the Cement and Concrete Industry, Bjarne Osbaeck, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p107-121.

Industries

The Canadian Cement Industry: A Partner in Environmental Improvement, Eric G. Fines, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep

L. Sarkar, ed., 1994), p406-423.

Environmental Technology Management of the Cement Industry in India and Neighbouring Countries, A. K. Chatterjee, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p438-480.

Growing Pains for a Maturing Industry, ME Mar./Apr. 94, pl.

Lunar Base Aspects for Biotechnology Industry, Judith unar base Aspects for Block-minorgy industry, Jadian Fielder and Nickolaus Leggett, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1230-1236.

Management Strategy of Cement Industry in Technology Toward the Next Century, Hiroshi Uchikawa, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p524-561.

Mixed-Use Business Park Developments in Space: A Real-Estate Paradigm, Charles J. Lauer, Joseph P. Hopkins, Hugh M. Kelso, Brent Sherwood and Dana G. Andrews, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1471-1481.

The Regulatory Process - An Industry Perspective Responding to New Regulations, Gerald A. Hapka and Robert A. Reich, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p134-144.

Inelastic action

Fracture Energy Formulation for Inelastic Behavior of Plain Concrete, G. Etse and K. Willam, EM Sept. 94. p1983-2011.

Inelastic Link Element for EBF Seismic Analysis, James M. Ricles and Egor P. Popov, ST Feb. 94, p441-463.

The Inelastic Response of an Offshore Platform in Hurri-cane Andrew, Gary R. Imm, Patrick E. O'Connor and James M. Light, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p7-12

Inelastic Response of Metal Matrix Composite Tubes, Robert S. Salzar and Furman W. Barton, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p266-275.

Localization Analysis of Nonlocal Model Based on Crack Interactions, Milan Jirásek and Zdeněk P. Bažant, EM July 94, p1521-1542.

Nonlinear Inelastic Analysis of Steel Beam-Columns I: Theory, Yong Lin Pi and N. S. Trahair, ST July 94, p2041-2061.

Nonlinear Inelastic Analysis of Steel Beam-Columns II: Applications, Yong Lin Pi and N. S. Trahair, ST July 94, p2062-2085. Nonlocal Damage Theory Based on Micromechanics of Crack Interactions, Zdeněk P. Bažant, EM Mar. 94, p593-617.

Notional-Load Plastic-Hinge Method for Frame Design, J. Y. Richard Liew, D. W. White and W. F. Chen, ST May

94, p1434-1454.

Response of Space Trusses During Progressive Failure, George E. Blandford and Shien T. Wang, (Dynamic Re-sponse and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p1-16.

Scandish D. Malifa, 1993), p1-10.
Spread of Plasticity—Quasi-Plastic-Hinge Approach,
Mourad R. Attalla, Gregory G. Deierlein and William
McGuire, ST Aug. 94, p2451-2473.
Viscous Damping in Inelastic Structural Response, Dionisio Bernal, ST Apr. 94, p1240-1254.

Inertially Favorable Trajectories for Robot Motion in Space, Lyman J. Petrosky and Irving J. Oppenheim, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p220-228.

Approximate Form of Green-Ampt Infiltration Equation, Jeffry J. Stone, Richard H. Hawkins and Edward D. Shirley, IR Jan./Feb. 94, p128-137.

Comparison of Infiltration Equations Using Flooding Infiltrometer Data, David B. Thompson and Margaret Medellin, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1090-1094.

Computer Model for Infiltration System Design, Thomas N. Debo, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p241-248.

Constant Time Interval Hortonian Infiltration Model, Jin Lee and Katumi Musiake, IR Mar./Apr. 94, p250-265. Correct Form of Hall Technique for Border Irrigation Ad-

vance, A. Al-Azba and T. Strelkoff, IR Mar./Apr. 94, p292-307.

Critical Rainfall Duration for Maximum Discharge from Overland Plane, Charng-Ning Chen and Tommy S. W. Wong, HY Sept. 93, p1040-1045.

Data Capture with GPS for Sewer Map Updates, John S. Gresh and Rodolfo B. Fernandez, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1615-1622.

Effects of Air Compression and Counterflow on Infiltration into Soils, M. E. Grismer, M. N. Orang, V. Clausnitzer and K. Kinney, IR July/Aug. 94, p775-795.

Evaluation of In-Place Wetting Using Soil Suction Measurements, Kenneth D. Walsh, William N. Houston and Sandra L. Houston, GT May 93, p862-873.

Flow Analysis Used to Diagnose Pipe Capacity and Sewer Overflow Problems in Sydney, Australia, Patrick A. Hayes, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p439-451.

Furrow Advance-Rate Solution for Stochastic Infiltration Properties, D. Renault and W. W. Wallender, IR May/

June 94, p617-633.

Horton Infiltration Equation Revisited, A. Osman Akan, IR Sept./Oct. 92, p828-830. Infiltration-Advance Equation for Finite Linear Source,

William O. Rasmussen, IR July/Aug. 94, p796-812. Local Sewer Rehabilitation - Metro Chicago, William A Macaitis and Robert Kuhl, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p111-122.

Modeling a Ponded Infiltration Experiment at Yucca Mountain, NV, David B. Hudson, Alan L. Flint and Wil-liam R. Guertal, (High Level Radioactive Waste Man-agement, High Level Radioactive Waste Program Com-

mittee, 1994), p2168-2174.

Modeling of Infiltration from Trenches for Storm-Water Control, Michael Duchene, Edward A. McBean and Neil R. Thomson, WR May/June 94, p276-293.

Optimal Operation of Soil Aquifer Treatment System, Zongwu Tang and Larry W. Mays, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p441-444.

Optimum Operation of Recharge Basins, Hasan Mushtaq, Larry W. Mays and Kevin E. Lansey, WR Nov./Dec. 94, p927-943.

Overflow Elimination Benefits from GIS Based Technolo-

gy, Rod Thornhill, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p829-835. A Preliminary Characterization of the Spatial Variability of Precipitation at Yucca Mountain, Nevada, Joseph A. Hevesi, Dale S. Ambos and Alan L. Flint, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2520-2529.

Rehabilitation of Belle Isle Siphon in Boston, Massachusetts, Emile Hamwey and Lisa Harris, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham,

ed., 1994), p247-256. Sewers and Computers, Rodolfo B. Fernandez and Brian W. Daniels, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p836-842.

Shallow Infiltration Processes in Arid Watersheds at Yucca Mountain, Nevada, Lorraine E. Flint, Alan L. Flint and Joseph A. Hevesi, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2315-2322. Simple Method for Identification of Border Infiltration and

Roughness Characteristics, John D. Valiantzas, IR Mar./

Apr. 94, p233-249. Stability of Shale Embankments, Tien H. Wu, Brian W. Randolph and Chiung-Shiann Huang, GT Jan. 93,

Transmission Losses from Ephemeral Stream in Arid Region, Mohamed J. Abdulrazzak and Ali U. Sorman, IR May/June 94, p669-675.

Infiltration rate

A Survey of Stormwater Infiltration Basins in the Puget Sound Region, Karin Hilding and Rich Horner, (Water Policy and Management: Solving the Problems, Darrell Fontane, ed. and Harry N. Tuvel, ed., 1994), p722-

Inflatable structures

Analysis of Inflating Habitable Space Structures with neomass (near-Earth-object mass), Anthony Zuppero, Nancy Linarez-Royce and Pat Whitman, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p247-256.

A Generic Inflatable Structure for a Lunar/Martian Base, Willy Z. Sadeh and Marvin E. Criswell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1146-

1156

Load-Deflection Behavior of Space-Based Inflatable Fabric Beams, J. A. Main, S. W. Peterson and A. M. Strauss, AS Apr. 94, p225-238. A Membrane Structure for a Lunar Assembly Building,

Mark E. Schroeder and Philip J. Richter, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p186-195.

New Technology for Navigation Entrance Black River

Canal, Larry Osborn, Kevin MacIntosh and Dave Werren, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994),

Non-Intrusive Experimental Setup for Inflatable Dam Models, T. A. Economides and D. A. Walker, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p500-508.

Tension Element to Reduce Loads in Rim Support of Inflatable Reflector, Gershon Grossman, AS Apr. 94, p129-142

Inflation, economic

The Inflation Equation, Joao Otavio Brizola and Paul C. Dinsmore, WP Special issue 94, p41-44.

Practical Approach to Cope with Construction Cost Uncer-

tainty in an Inflationary Environment, Diego Echeverry and Jorge Garcia, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2149-2156.

Quantification of Cost Uncertainties Using Neural Network Technique, Awad S. Hanna and Li-Chung Chao, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p41-46.

Inflow

Data Capture with GPS for Sewer Map Updates, John S. Gresh and Rodolfo B. Fernandez, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1615-

Differential Dynamic Programming for Estuarine Manage-ment, Guihua Li and Larry W. Mays, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p653-656.

Flow Analysis Used to Diagnose Pipe Capacity and Sewer Overflow Problems in Sydney, Australia, Patrick A. Hayes, (*Hydraulics of Pipelines*, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p439-451.

Freshwater-Inflow Need of Estuary Computed by Texas Estuarine MP Model, Junji Matsumoto, Gary Powell and

David Brock, WR Sept./Oct. 94, p693-714.

Multiobjective Models for Determining Freshwater Inflows to Bays and Estuaries, Ning Mao, Lise LeBlanc, James Siebert, Wenchin Shi and Larry W. Mays, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p649-652.

New Methodology for Optimization of Freshwater Inflows to Estuaries, Yixing Bao and Larry W. Mays, WR Mar./

Apr. 94, p199-217

Non-Point Pollution Loadings and their Impacts on Tenromeron Formation Examines and their impacts of Fernessee Valley Reservoirs, Julia Burr Avera and John A. Gordon, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1247-1251.

Numerical Model Verification on Tidal Current in Tokyo Bay, Yoshitaka Fukui, Toshio Kodama and Mutsuto Kawahara, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p880-

Optimization of Freshwater Inflows to Lavaca-Tres Palacios, Texas, Estuary, Yixing Bao and Larry W. Mays, WR Mar./Apr. 94, p218-236.

Sewers and Computers, Rodolfo B. Fernandez and Brian W. Daniels, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p836-842.

Step-Function Response of Muskingum Reach, J. C. I. Dooge, M. Perumal and Q. J. Wang, IR Mar./Apr. 93, p410-415.

Information

Annual Liability Survey Shows Premiums Rising, CE Jan. 94, p25.

ASCE to Launch High-Tech Newsletter, CE Mar. 94, p8. Community Partnering in Accelerated Construction Program, Leslie R. Henley, UP June 94, p74-86.

Computer-Industry Heads Make the Case for 'EW', CE Aug. 94, p22.

Entrants Sought for Presidential Awards, CE Sept. 94, p8. Integrated Design-Process Model, Victor E. Sanvido and Kevin J. Norton, ME Sept./Oct. 94, p55-62

Management Division Calls for Papers, ME Jan./Feb. 94, p12.

More on Mexico, Vietnam, WP Spring 94, p4.

A Photo Worth 1,000 Words...or More, CE Jan. 94, p8. The State (By State) of Water Quality, CE Mar. 94, p8.

World Bank Charts a New Course for Water-Resources Management, CE Jan. 94, p24-25.

A 'Grab' Bag of Information on Rebar, CE Dec. 94, p8.

Information management

Capturing As-built Project Information for Facility Management, L. Y. Liu, A. L. Stumpf, S. S. Kim and F. M. Zbinden, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p614-621.

Case-Based Design in the SEED System, Ulrich Flemming, Robert Coyne and James Snyder, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p446-453.

Computerized Facility Information Management Systems, Mike Tidwell and Cal Leckington, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p396-401.

Conceptual Models of Product, Project and Document Data; Essential Ingredients of CIC, Bo-Christer Björk, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p980-987.

EDI and Its Role in Information Management, G. Edward Gibson, Jr., Lansford C. Bell and Clarisse Molad, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1798-1805.

Effective Project Planning Techniques, Christian A. Jensen,

CE Feb. 94, p66-67.

A Frame-Based Drawing Management System Based on Building Object Model, Gakuhito Hirasawa and Yusuke Yamazaki, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p555-562.

A Good Newsletter is Like the Perfect Employee, ME

Mar./Apr. 94, p2. How to Organize CADD Systems (Part 2), CC Mar. 94,

p8-10. How to Organize CADD Systems (Part 3), John Voeller, CC Apr. 94, p6-7.

The IAEA's High Level Radioactive Waste Management Programme, D. E. Saire, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2279-2283.

The ICR; \$130 Million of Water Quality Monitoring, Albert Ilges and Fredrick W. Pontius, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p788-791.

An Information Engineering Approach for Environmental Impact Assessment and Monitoring Program, Chun-Hou Orr and Shu-Fang Peng, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p249-256.

Information Modeling and Applications, Victor E. Sanvido, Kirby A. Kuntz, Theodore D. Lynch, John I. Messner and David R. Riley, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p786-789.

Information, Global-Style, Javier A. Baldor, WP Spring 94,

Integrated GIS for Construction Site Investigation, Amr R. Oloufa, Ahmed A. Eltahan and C. S. Papacostas, CO Mar. 94, p211-222.

Is Your Automated Information System Obsolete? Chester A. Shuman, ME Mar./Apr. 94, p24-26.

Knowledge Representation and Processing in Relational Data Base, Teresa M. Adams, CP Apr. 93, p238-255. Managerial Aspects of Information-Technology Strategies

for A/E/C Firms, James Breuer and Martin Fischer, ME July/Aug. 94, p52-59.

MIS Links Personnel Projects, Proposals, ME Mar./Apr. 94, p3.

Multimedia in Civil Engineering, Jorge A. Vanegas and Nelson C. Baker, CE May 94, p71-73.

An Object-Oriented Scheduling Data Acquisition Model Using a Hybrid Expert System, Kyungrai Kim, Calin M. Popescu and Gary D. Hamilton, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p356-361.

OODBMS in AEC Software Development: The Highs and Lows of Developing a Commercial Application, Gary D. Hamilton, Lisa Bell, Wade Cohn, Francois Grobler and Kyungrai Kim, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1430-1437.

A Parameter Network and Model Pyramid for Managing Technical Information Flow, Scott Sinnock and Hollister A. Hartman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p306-314.

Pen Computers in Civil Engineering, Don M. Newell, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p1631-1638.

Prototype Applications of Integrated Data Models in Construction, M. Betts, P. Brandon, T. Child, G. Cooper and J. Kirkham, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p988-991.

Repository Program Licensing Approach, Thomas M. Williamson and April VanCamp Gil, (*High Level Radioactive Waste Management*, High Level Radioactive Waste Program Committee, 1994), p1585-1592.

Scaling Up is Hard to Do: Experiences in Preparing a Case-Based Design Aid Prototype for Field Trial, Eric A. Domeshek, Craig M. Zimring and Janet L. Kolodner, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p430-437.

A Value Chain Model to Support Business Process Reengineering in Turnkey Contracting Firm, K. C. Choi, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1575-1582.

Water-Quality Data Management: Survey of Current Trends, Laurel Saito, Neil S. Grigg and Robert C. Ward,

WR Sept./Oct. 94, p587-612.

Information retrieval

Alternative Designs for a Water Resources Planning and Management Electronic Information Exchange Network, Quentin W. Martin, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p690-693. Aspects of Virtual Master Builder, Victor E. Sanvido,

Steven J. Fenves and John L. Wilson, El July 92, p261-

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Hypertext and Claim Analysis, Geoffrey Bubbers and John

Christian, CO Dec. 92, p716-730.

Intentions and Credences - An Australian Approach to Computerised Building Regulation, Jane Blackmore, Frank Leong and Ron Sharpe, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p131-136.

Knowledge Representation and Processing in Relational Data Base, Teresa M. Adams, CP Apr. 93, p238-255.

Information system design

Creation of Land Information System for Milwaukee County, Wisconsin, Kurt W. Bauer, SU Nov. 94, p156-165

How to Organize CADD Systems (Part 2), CC Mar. 94, p8-10.

Integrated Building Design Systems in Context of Product Data Technology, Godfried Augenbroe, CP Oct. 94, p420-435.

Information systems

Aspects of Virtual Master Builder, Victor E. Sanvido, Steven J. Fenves and John L. Wilson, El July 92, p261-

Bridge Evaluation Using a Hybrid Information System, John L. Wilson and Stephanie J. Wagaman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p1131-1136.

Building Product Model, A First Brick in Computer Inte-grated Construction, Michael J. Riley and Hamid H. R. Sabet, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p767-777.

Business Reengineering in a South American Oil Compa ny, Matilde G. de Pena and Deborah J. Fisher, ME July/

Aug. 94, p45-51.

Computer-Assisted Planning, Programming, Budgeting System (CAPPB), Bruce C. Goettel, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p390-395.

Contractors Ride on Information Highway, CE July 94, p8. Data Fusion for an ATIS Operational Test: Description and Computational Issues, Nagui M. Rouphail and Peter Nelson, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p1532-1535.

Design of a Network and Travel Simulator: A Tool Box for the Analysis of Route Choice Behavior in the Presence of Information, Kenneth M. Vaughn, Prasuna Reddy, Ryuichi Kitamura, Paul P. Jovanis and Mohamed A. Abdel-Aty, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1743-1750.

Developments to the IRMA Model of AEC Projects, Thomas Froese, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p778-785.

Dimensions and Management of Facility Performance, James C. Porter, El Jan. 94, p1-7.

Electronic Yellow Pages for Pre-trip Planning Systems Prasuna DVG Reddy, Ryuichi Kitamura and Paul P. Jovanis, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1516-1523.

Establishing Management Information Systems for Mul-tiproject Programs, Russell Zapalac, Karen Kuemmler and Tim Malagon, ME Jan./Feb. 94, p37-42.

Evaluating ATIS Impacts on Air Quality, H. Al-Deek, R. Wayson and A. E. Radwan, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p95-

Functional Analysis Using Partitioned Engineering Data Flow Model, D. H. Douglas Phan and H. Craig Howard, CP Jan. 94, p2-19.

Hypertext and Claim Analysis, Geoffrey Bubbers and John Christian, CO Dec. 92, p716-730.

Information, Global-Style, Javier A. Baldor, WP Spring 94, p26-30.

Is Your Automated Information System Obsolete? Chester A. Shuman, ME Mar./Apr. 94, p24-26.

Maintenance Management Systems for Urban Drainage, Neil S. Grigg, (Urban Drainage Rehabilitation Pro-grams and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p2-10.

Management Information System Application on a Multi-Million Overseas Project, Gamil F. Fanous and Mufid F. Samara, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p2157-2174.

Managerial Aspects of Information-Technology Strategies for A/E/C Firms, James Breuer and Martin Fischer, ME July/Aug. 94, p52-59.

An Object Oriented Highway Information System in the Client-Server Environment, Kelvin C. P. Wang and John P. Zaniewski, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1959-1966.

RATAS Project-Developing an Infrastructure for Computer-Integrated Construction, Bo-Christer Björk, CP

Oct. 94, p401-419.

Redesigning Job Site Planning Systems, Glenn Ballard, Gregory Howell and Saied Kartam, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1564-1574.

Strategic Ship Routing Impacts of Temporal Coverage with Real-time Satellite Altimeter-Based Current Information, Young-Kyun Lee, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p483-489.

Tank Waste Information Network System (TWINS), Gary D. Roberson, Jim Brown and Dana S. Roberson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1731-1738

Traffic Safety Research: Database Issues and Analysis Techniques, Yusuf M. Mohamedshah and Charles C. Liu, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1846-1853.

Using Interactive Simulation to Explore Drivers' Response to Visual Information Systems, Jeffrey L. Adler, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1735-1742.

Voice Operated Information System (VOIS) for Electronic Pages Information System, Prasuna DVG Reddy, Ryuichi Kitamura and Paul P. Jovanis, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1524-1531

Infrared analysis

Remote Sensing Pipeline Rehabilitation Methodologies Based Upon the Utilization of Infrared Thermography, Gary J. Weil, Richard J. Graf and Leann M. Forister, (Urban Drainage Rehabilitation Programs and Tech-niques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p173-181.

Infrared scanners

Remote Infrared System for Scanning Hazardous Waste Tanks, Kim L. H. Morris, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1104-1109.

Agricultural Infrastructure for Urban Irrigation, D. Heinert, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p339-342.

Airport Bill Finally Lands, CE Oct. 94, p116. Airport Infrastructure Bill Passes, NE July 94, p2. Applying a Problem-Solving and Consensus Building Approach to Transportation Infrastructure and Environmental Protection, Eugene W. Cleckley, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p226-228.

Argentina Outlook, WP Spring 94, p4.
Argentina: Back in Business, Kaitlin Quistgard, WP Spring 94, p19-22. The Art of Infrastructure, Teresa Austin, CE Sept. 94,

p40-43. ASCE Gives Advice On Infrastructure Funding to Atlanta,

CE Dec. 94, p72. ASCE Leaders Chart a Path for Rebuilding U.S. Infrastruc-

ture, NE July 94, p1-2. ASCE Offers Options for Funding Atlanta's Infrastructure

Renewal Program, NE Nov. 94, p1,3.

Budgeting for Facility Repair and Maintenance, A. L. Barco, ME July/Aug. 94, p28-34.

A Chance Constrained Model Using Kinematic Wave

Routing for Stormwater Infrastructure Rehabilitation, Timothy L. Jacobs and Miguel A. Medina, Jr., (Urban Drainage Rehabilitation Programs and Techniques, Drainage Renabilitation Programs and Techniques Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Commit-tee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p39-54.

Civil Engineering and Civic Monuments: The Commissioning, Design and Public Perception of Urban Infrastructure Projects, Anthony C. Webster, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1244-1249.

Civil Engineers Urge Congress to Fund National Highway System, NE Apr. 94, p2.
Clinton Administration's Investment Budget for FY1995.

CE Apr. 94, p128.

Concurrency-Management Practices in Florida: Comparative Assessment, Greg Stuart, UP June 94, p59-73. Connecticut Bridge-Deck is Weekend Wonder, CE Dec.

94, p21,23. Constructed Civil Infrastructure Systems R&D: A Europe-an Perspective, CERF report #94-5010, Civil Engineer-

ing Research Foundation, 1994, 0-7844-0001-6, 145pp. Construction Technologies for Sewer Rehabilitation, Sa ago M. Reyna, Jorge A. Vanegas and Abdul H. Khan, CO Sept. 94, p467-487.

Countdown to the Olympics Begins in Atlanta, CE June

Damage to Highway Infrastructure 1993 Mississippi River Basin Flooding, A. C. Parola, T. E. Fenske and D. J. Hagerty, (Hydraulic Engineering '94, George V.

Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p26-30. Demonstrated Success in Reducing Risk of Losses in a Severe Hurricane: Hurricane Omar Experience, Juan C. Tenorio and Jack B. Jones, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p716-725. Developing a National Spatial Data Infrastructure, John McLaughlin and Sue Nichols, SU May 94, p62-76.

Durability of Steel/Composites Bonds for Rehabilitation of Structural Components, Pierre E. Bourban, Steven H. McKnight, Stacy B. Shulley, Vistasp M. Karbhari and John W. Gillespie, Jr., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p295-302

Effects of Hurricanes Andrew and Iniki on Lifelines, Masoud M. Zadeh, Tom Larsen, Charles Scawthorn, Craig Van Anne and Tom K. Chan, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p223-232

Federal Public Works Infrastructure R&D: A New Perspective, Report No. 93-EF1003, Civil Engineering Research Foundation, 1993, 0-87262-943-0, 76pp.

Fiber Composite Warp for Rehabilitation of Concrete Structures, Salem S. Faza and Hota V. S. GangaRao, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1135-1139. First Findings From CERF's Task Force to Europe, CE

Mar. 94, p77.

For O'Neil's Firm, China Trip Could Be the Start of Something Big, NE Oct. 94, p15.

A Framework for a Database of Construction Costs and Productivity at the Process Level for Transportation Infrastructure Development, Antonio A. González-Quevedo, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1854-1858. Future Trends and Needs in Hydraulics, Daryl B. Simons,

HY Dec. 92, p1607-1620. High Modulus Glass-ceramic Fiber Reinforced Composites for Currently Emerging Infrastructure Applications, Frederick T. Wallenberger, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p272-279.

High Performance Construction Materials and Systems: An Essential Program for America and Its Infrastructure -Technical Report, Report 93-5011, Civil Engineering Research Foundation, 1993, 0-87262-939-2, 205pp.

High-Performance Construction Materials and Systems: An Essential Program for America and Its Infrastructure -Executive Report, Report 93-5011.E, Civil Engineering Research Foundation, 1993, 0-87262-938-4, 32pt

Ideal of Civil Engineering, George Bugliarello, El July 94, n290-294

In Five Years, CERF Has Significantly Impacted Construc-tion Industry R&D, NE Nov. 94, p16.

Increasing Role of Privatization in Engineering and Con-struction, Janet K. Yates and Subhransu Mukherjee, ME Mar./Apr. 94, p57-65.

Infrastructure advice, WP Spring 94, p4.

Infrastructure and Economic Development: Civil Engineer-ing Perspective, Neil S. Grigg, El Jan. 93, p51-61. Infrastructure Management: U.S. and Japanese Systems

Contrasted, Neil S. Grigg, UP Mar. 94, p1-13.

An Infrastructure Records Management System Using PC-based Image Scanning Technology, Stephen M. Benz, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1806-1811

Infrastructure: a More Comprehensive Policy is Needed,

Neil S. Grigg, El Apr. 94, p183-192.
Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994, 0-7844-0063-6, 1252pp. Integrated Research for Civil Infrastructure Systems: A Future Challenge, S. C. Liu, K. P. Chong and M. P. Singh, (Analysis and Computation, Franklin Y. Cheng, ed.,

1994), p1-13. Intelligent Renewal Keeps Infrastructure Civil, CE Mar.

Life Prediction of Materials/Systems of Transportation Infrastructure, K. P. George, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994),

Markovian Models for Bridge Maintenance Management, William T. Scherer and Douglas M. Glagola, TE Jan.J

Feb. 94, p37-51.

Master Planning -- "Fact or Fiction", Marcus D. Hodges (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p77-82.

NAFTA Spawns New Development Bank, WP Special

issue 94, p2.

NSF Report Urges More Research on Civil Infrastructure Systems, NE Feb. 94, p3.

Overcrossing a Freeway with Water Pipelines in Dedicated Structures, Richard J. Pardini, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed.,

1994), p387-394.

An Overview of the Federal Response to Hurricane Iniki, Frank R. Finch, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed.

and Mehrdad Sotani, ed., 1994, p.294-299.
Poirot Calls for Synergy at Composites Conclave in Cincinnati, CE Apr. 94, p.72.74.
Poland Gets Moving, Jeff Austin, WP Special issue 94, p35-38.

RATAS Project-Developing an Infrastructure for Computer-Integrated Construction, Bo-Christer Björk, CP Oct. 94, p401-419.

Report Recommends 'Tailored' Infrastructure, CE June 94,

p22.

Robotic Rehabilitation of Sewer Infrastructure, R. Laurence Day, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p383-391.

Robotics for Challenging Environments, Laura A. Dem-setz, ed. and Paul R. Klarer, ed., 1994, 0-87262-913-9,

Science Operations and Engineering Impacts to Lunar Outpost Design, John E. Gruener and David S. McKay, (Engoster) gineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p998-1007

Seismic Renewal of Civil Infrastructure Systems, M. P. Singh and S. C. Liu, (Structures Congress XII, N. C Baker, ed. and Barry J. Loodno, ed., 1994), p1508-1513.

SemiActive Structural Control: A Low Cost Fix for An Infrastructure at Risk, C. C. Kuo, H. Wu, L. Liu, R.L. Sack, A. Ebrahimpour and W. N. Patten, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p387-392.

Sharing the Risk, Candace Port-Hull, WP Special issue 94,

p14-19.

339

Specifying and Attaining Acceptable Marina Tranquility, Jack C. Cox, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p470-479.

Summers Jobs for CE Students Combine Infrastructure Research with Industrial Internships, CE Feb. 94, p69.

urvey on Local Public Works Yields Some Surprises, CE July 94, p21-22.

Transferring Construction Technology to the Moon and Back, John F. Connolly and Debra D. Shoots, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1086-1096.

Transport Infrastructure Choices for Industrial Cis-lunar Traffic, John Sved, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p587-596.

Trenchless Sewer System Reconstruction Techniques, Lynn E. Osborn, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p159-172.

Venue: Vietnam, WP Special issue 94, p5. Washington State DOT Picks Privatization Projects, CE

Nov. 94, p11.

Water Policy and Management: Solving the Problems in Southern New Jersey, Frank S. Impagliazzo, (Water Pol-icy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p497-500.

Cut and Cover Construction of the SSC Injector Tunnels, Mahendra P. Yajnik and Wayne Q. Hudler, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p749-754.

Monitoring of Water Injection Dredging, Dredging Pollut-ed Sediment, W. G. Borst, Joh. G. S. Pennekamp, H. Goossens, A. Mullié, P. Verpalen, T. Arts, P. F. van Dreumel and W. D. Rokosch, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p896-905.

Water Injection Dredging in the United States, David Knox, Daniel J. Krumholz and James E. Clausner, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p847-

OSHA May View Injury Information, CE July 94, p25.

Owner and Contractor Not Duty-Bound, CE Dec. 94, p25. Severity Measures in Side-Impacts with Narrow Roadside Structures, M. H. Ray, J. F. Carney, III, M. I. Faramawi and L. A. Troxel, TE Mar./Apr. 94, p322-338.

Subcontractor May Share Some Site-Safety Burden, CE Nov. 94, p26.

Subcontractor Must Indemnify, CE Dec. 94, p24-25.

Inland waterways

An Integrated Shell (ROSS3) for Transport Modeling, Visualization, and Data Management, Keerthisiri S. Angammana, Poojitha D. Yapa and Hung Tao Shen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p150-154. Inlets, waterways

Comparison of Two Eductors for Sand Bypassing, Gregory L. Williams and James E. Clausner, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p875-884.

Design of Fluidizer Systems for Coastal Environment,

Richard N. Weisman and Gerard P. Lennon, WW Sept./

Oct. 94, p468-487. History of Entrance Channel Dredging and Disposal Operations: St. Marys, Georgia/Florida, Joan Pope, J. Bailey Smith and Laurel T. Gorman, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p906-917.

Hydraulic Model Studies of Recessed Curb Inlets and Bridge Drains, E. R. Holley, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p528-532.

Influence of Sikes Cut on Apalachicola Bay, FL; A Preliminary Analysis from a Three-Dimensional Perspective, William K. Jones, Boris Galperin, Robert H. Weisberg and T. S. Wu, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p351-365.

Pollution Susceptibility of Well-Mixed Tidal Basins, Jo-seph L. DiLorenzo, Rhomaios V. Ram, Poshu Huang and Tavit O. Najarian, WW July/Aug. 94, p404-422

Port Authority's Role in Inlet Management and Beneficial Use of Dredged Material, Malcolm E. McLouth, Joseph Lapolla and Kevin Bodge, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p971-980.

Sediment and Debris Removal Inlet Structure for Canal Pipelines, Gilbert Horrocks, H. Lee Wimmer and Pam

McMullin, IR May/June 94, p607-616.

Waves Propagating on an Adverse Jet, Fredric Raichlen, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p657-670

Innovation

Adding Spice to Marketing Materials, ME May/June 94,

AIA Awards Celebrate the Old and the New, CE Apr. 94, p14.

The Bell Tolls...for Toll Collectors, CE Oct. 94, p8. Bridge System Breaks New Ground as Storage Vault, CE

July 94, p13-14. Building the Perfect Ski Slope?, CE Mar. 94, p10.

Caltrans Toll Bridges to Go Electronic, CE June 94, p19-

Case Study of Burlington Cable-Stayed Bridge, Kevin E. Swiggum, Stuart D. Anderson and Jeffrey S. Russell, CO Sept. 94, p649-666.

Cleaning Up Toxic Wastes With Baking Soda, CE Sept. 94, p19.

Computers are a Useful Tool (ltr), CE Apr. 94, p32.

Computers are Not Engineers (ltr), CE July 94, p29-30. Construction Process Innovation Through SMART Sys-tem, Yusuke Yamazaki and Junichiro Maeda, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1583-1590.

Deep Dig, Tight Squeeze, Joseph C. Clougherty, Richard F. O'Brien and Mark W. Pelletier, CE Aug. 94, p42-45.

DOD Energizes Fuel-Cell Development, CE Oct. 94, p17-

Emerging Technology Newsletter Debuts, CE June 94, p8. Engineers Have Designs on Re-Engineering, ME Sept./ Oct. 94, p14.

Evolution of Cable Arm Clamshell Bucket, J-P. Pelletier, R. Santiago and J. Lajeunesse, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1050-1060.

Fiber Matrix Bonds Soil to Charred Hills, CE June 94, p91. Finding New Forms of Fuel, ET Aug./Sept. 94, p10.

Heads I Win, Tails You Lose, CE Apr. 94, p8. Ideal of Civil Engineering, George Bugliarello, El July 94,

p290-294. Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994, 0-7844-0063-6, 1252pp.

Innovations in Major Suspension Bridge Design, Klaus H. Ostenfeld, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p772-778.

Introducing New Process Technologies into Construction Companies, Maria Laborde and Victor Sanvido, CO Sept. 94, p488-508

It's Official: HITEC Opens for Business, NE Mar. 94, p3. Japan Builds 21st Century Monuments, Charles R.

Heidengren, CE Aug. 94, p57-59. Leading Creative People as Consulting Engineering Be-comes Globalized, Brian J. Lewis, ME Mar./Apr. 94,

Machine Makes Microtunneling Easy, CE July 94, p78. Membrane Structures: Technological Innovation and Architectural Opportunity, Edmund Happold, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p547-

Microwave Process Strips Structures of Lead Paint Safely and Cheaply, ET Apr./May 94, p1,3.

Mounted Tower Crane Rises Above Tight Jobsite, CE Oct.

Nanorobots Can Explore Planets, Says Researcher, CE May 94, p19.

Nebraska Builds First Metric Bridge in U.S., NE Oct. 94, p7.

New Method for Stabilizing Phosphatic Clay by Using Lime Columns, NE July 94, p16.

Nova Award Winners Not the Same Old Thing, CE July 94, p19,21.

On the Net, CE Oct. 94, p8.

Reversal of Fortune in Design-Build Terms, CE Mar. 94,

Rugged Computer to Aid Bridge Inspection, CE Sept. 94, San Antonio First in Smart-Highway Class, CE Aug. 94,

p10,12. A Sea Turtle Deflecting Hopper Dredge Draghead, Michael P. Alexander and Glynn E. Banks, (*Dredging '94*, E.

Clark McNair, Jr., ed., 1994), p857-864.

Sending College Hires on a Two-Year Mission, ME July/ Aug. 94, p12. Strategies for Technology Push: Lessons from Construc-tion Innovations, C. H. Nam and C. B. Tatum, CO Sept.

92, p507-524. The Stump - A New Dimension in Dredging, George W. Batchelder, (*Dredging '94*, E. Clark McNair, Jr., ed.,

1994), p701-707.

Summary of Highway Product Evaluation Practices and HITEC Needs Survey, CERF Report No. 94-5012, Civil Engineering Research Foundation, Highway Innovative Technology Evaluation Center, 1994, 0-87262-860-4,

Survey Explores Ins and Outs of Innovation, CE July 94, p23.

Survey on Local Public Works Yields Some Surprises, CE July 94, p21-22.

Technology Development and Transfer in Environmental Management, Jonathan Katz, Alan Karnovitz and Martin Yarbrough, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p314-7-314-12.

Thinking Thin for Road Repair, ET Oct./Nov. 94, p6. Trash Creates the Sound Wall of Silence, CE Sept. 94, p8.

Trenchless Sewer System Reconstruction Techniques, Lynn E. Osborn, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilita-tion Programs and Techniques, ASCE, 1994), p159-172.

Utility Pole Can Be Installed By Hand or Helicopter, CE May 94, p94.

Vice Presidents' Awards Single Out Best Chapters in ASCE's Four Zones, NE Oct. 94, p10.

The Welland River Dredging Demonstration, Philip Miles and Donald Marr, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1061-1070.

Wetlands Return to Former Mining Site, CE Oct. 94, p25. 'Shock Absorbers' for Cars and Quakes, ET Oct./Nov. 94,

Inspection

Advanced Uses of Pen Computers in Building Inspection, Raja R. A. Issa, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1454-1457.

Application of Pen Computing to Construction Inspection, Jason M. Jazayeri, Farid Jazayeri and Katherine Litchfield, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1438-1445.

Assessing Fitness for Purpose of Offshore Platforms. I: Analytical Methods and Inspections, H. Banon, R. G. Bea, F. J. Bruen, C. A. Cornell, W. F. Krieger and D. A. Stewart, ST Dec. 94, p3595-3612.

Assessing Fitness for Purpose of Offshore Platforms. II: Risk Management, Maintenance, and Repair, H. Banon,

ST Dec. 94, p3613-3633.

Assessment and Upgrade of an Older Transmission Line, Robert O. Kluge and Alain H. Peyrot, (Structures Con-gress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p607-612.

Beliefs about Hurricane Andrew, Construction, and Evacuation, Earl J. Baker, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p31-36

Critical Issues in Post Disaster Code Enforcement, Wilson C. Barnes and Jose D. Mitrani, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994),

p284-293.

CSO Rehabilitation Strategies for Urban Areas, Edward H. Burgess and Larry A. Roesner, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p184-193.

Design and Construction Deficiencies and Building Code Adherence, Mohammed S. Khan and Wimal Suaris, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad So-

tani, ed., 1994), p133-146.

Fatigue-Reliability Updating Through Inspections of Steel Bridges, Zhengwei Zhao, Achinyta Haldar and Florence L. Breen, Jr., ST May 94, p1624-1642.

Hurricane Andrew - Structural Performance of Buildings

in South Florida, Edward L. Keith and John D. Rose, CF Aug. 94, p178-191.

Hurricane Shelter Design Criteria for Public Schools, Ajay Shanker, R. Wayne Drummond, Raja R. Issa and Kalika Wamanacharya, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p233-240.

Improvement and Re-establishment of Good Hydraulic Conditions in Sewers: The French Experience, Y. Diab and M. Mommessin, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p329-

338

Interceptor Inspection and Rehabilitation Program, William A. Macaitis and Amreek Paintal, (Urban Drainage Re-habilitation Programs and Techniques, Task Committee numerous and Techniques, 1888 Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p123-142.

Low-Cost Bridge Scour Measurements, J. D. Schall, J. R. Richardson and G. R. Price, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p114-118.

Maintaining Reliability of Concrete Structures. I: Role of Inspection/Repair, Yasuhiro Mori and Bruce R. Ellingwood, ST Mar. 94, p824-845.

Maintaining Reliability of Concrete Structures. II: Optimum Inspection/Repair, Yasuhiro Mori and Bruce R. Ellingwood, ST Mar. 94, p846-862.

Molhe Oeste Do Porto De Sines Reabilitação Definitiva Fiscalização Da Construção, Joaquim da Silva Pinto, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p229-264. Multi-Barrier Waste Package Fabrication and Closure Development, Wayne E. Wallin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p955-962.

Prototype Object-Oriented System for Maintenance of Timber Trusses, S. H. C. Foo and G. Akhras, CP July 94.

Reconstruction of the Dewey Square Tunnel, Brian Bren-ner, Dincer Akyali and Paul Moyer, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p772-780.

Silent Inspector - An Aid to Dredge Inspection, James Rosati, III and Timothy L. Welp, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p756-763.

Standard for the Structural Design of Composite Slabs (ANSI/ASCE 3-91) Standard Practice for Construction and Inspection of Composite Slabs (ANSI/ASCE 9-91) (St No. 91-003, 91-009), American Society of Civil Engineers, 1994, 0-87262-954-6, 90pp.

Structural Damage Identification from Dynamic-Test Data, Juan R. Casas and Angel C. Aparicio, ST Aug. 94,

p2437-2450.

Technologies for Planning Railroad Track Maintenance and Renewal, Donald Uzarski and Sue McNeil, TE

Sept./Oct. 94, p807-820.

Understanding the Modes of Failure for Sewers, Robert F. Serpente, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p86-100.

West Breakwater of the Port of Sines Final Rehabilitation Inspection of the Construction, Joaquim da Silva Pinto, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p265-301.

Installation

Cured-in-Place Pipe Doesn't Cause a Ripple, CE Feb. 94, p12,14,16.

The Development, Installation, and Monitoring of Smart Bolts for Bridges, I. Wayne Wallace, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1171-1178.

Slurry Trenching for Waterway Pipeline Installation, Samuel Carreon and Brian Doeing, (Hydraulics of Pipe-lines, Deon T. Fowles, ed. and Douglas H. Wegener, ed.,

1994), p261-279.

Standard Guidelines for the Design of Urban Subsurface Drainage (ANSI/ASCE 12-92) Standard Guidelines for Installation of Urban Subsurface Drainage (ASCE 13-93) Standard Guidelines for Operation and Maintenance of Urban Subsurface Drainage (ASCE 14-93) (St No. 92-012, 93-013, 93-014), American Society of Civil Engineers, 1994, 0-87262-996-1, 60pp.

Standard Practice for Direct Design of Buried Precast Concrete Pipe Using Standard Installations (SIDD) (St No. 93-015), American Society of Civil Engineers, 1994, 0-

87262-995-3, 50pp.

Tracking and Steering Systems in Trenchless Construction, R. Tanwani and D. T. Iseley, CO Mar. 94, p65-76.

Installation costs

Slurry Trenching for Waterway Pipeline Installation, Samuel Carreon and Brian Doeing, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p261-279.

Instream flow

Flushing Flows for the Water Manager, Robert T. Milhous, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

Instream and Streambank Environmental Feature Guidelines, J. Craig Fischenich, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p406-410.

Instream Flow Policy: An Alternative to Minimum Flowby, Donald R. Jackson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p222-225.

Instream Flow Strategies for Operation of the Federal Central Valley Project, Serge Birk, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p315-318.

Instream Flow Studies: Susquehanna Basin and Pennsylva-nia, Donald R. Jackson, (Water Policy and Manage-ment: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p145-148.

Water Policy and Management: Solving the Problems, Dar-rell G. Fontane, ed. and Harry N. Tuvel, ed., 1994, 0-7844-0020-2, 900pp.

Where is the Pendulum Now? Do We Really Know? D. R. Wheeler, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p155-167.

Effective Teaching Using SemiNotes, M. U. Hosain, El Apr. 94, p193-197.

National Survey of Materials Engineering Program, K. P. George, John R. Rohde and Srinivasa L. Iyer, El July 94, p313-323.

Instructions

Missouri River Master Manual Review and Update, Lawrence J. Cieslik and Roy F. McAllister, Jr., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p673-676.

Effective Teaching Using SemiNotes, M. U. Hosain, El Apr. 94, p193-197.

Instrumentation

Acoustic-Doppler Velocimeter (ADV) for Laboratory Use, Atle Lohrmann, Ramon Cabrera and Nicholas C. Kraus, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p351-365.

Addendums to the Prediction Package, Robert Gibbens, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M.

Gibbens, ed., 1994), p86-91.

Advances in the Characterization of Cement Clinker, Hiroshi Uchikawa and Shunsuke Hanehara, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p231-313.

Air Concentration Measurements in Highly-Turbulent Flow on a Steeply-Sloping Chute, James F. Ruff and Kathleen H. Frizell, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p999-1003.

Bridge Scour Instrumentation, P. F. Lagasse, E. V. Richardson and S. A. Sabol, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p36-40.

Buoy Directional Wave Measurements Using Magnetic Field Components, David W. Wang, C. C. Teng and R. Ladner, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p316-329.

Comparison of Infiltration Equations Using Flooding Infiltrometer Data, David B. Thompson and Margaret Medellin, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1090-

Comparison of Predicted and Measured Settlement of a Test Embankment Over Soft Soil, Kuo-Hsia Chang, William D. Kovacs and Ming-Jiun Wu, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1164-1175.

Computer-Controlled, Precision Pressure Standard, Othon K. Rediniotis, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation,

Clifford A. Pugh, ed., 1994), p509-518.

Data and Prediction Request for the Spread Footing Predic-tion Event, Robert Gibbens and Jean-Louis Briaud, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p11-85.

The December 1992 Storm at the New York Mud Dump Site, Scott McDowell, Brian May and Douglas Pabst, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p786-795.

Demonstration Project for Scour Instrumentation, J. D. Schall, W. R. Ivarson and T. Krylowski, (Fundamentals and Advancements in Hydraulic Measurements and Ex-

perimentation, Clifford A. Pugh, ed., 1994), p37-42.

Design and Installation of a New Settlement-Inclinometer Device, R. G. Campanella, R. S. Jackson, J. A. R. Ortigao and C. B. Crawford, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p911-922.

Developing Air Concentration and Velocity Probes for Measuring Highly-Aerated, High-Velocity Flow, Kath-leen H. Frizell, David G. Ehler and Brent W. Mefford, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p268-277

Development of a High Resolution Spectrometer for Measuring the Near-Earth RFI Environment: The First Auto-Correlator in Space, Namir E. Kassim, Kurt W. Weiler and Andrew W. Clegg, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1410-1421.

Downdrag on Piles: Review and Recent Experimentation, John Anthony Little, (Vertical and Horizontal Deforma-

tions of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1805-1826. Effects of Simulated Ice on the Performance of Price Type-AA Current Meter Rotors, Janice M. Fulford, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p251-258.

Experiences with an Undergraduate Structural Engineering Laboratory, Stephen Pessiki, Le-Wu Lu and Ben T. Yen, (Structures Congress XII, N. C. Baker, ed. and Barry J.

Loodno, ed., 1994), p1369-1374.

Experimental Measurements of Dynamic Loads Imposed Patten and A. Hamam, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1385-1390.

Field Performance of an Acoustic Scour-Depth Monitoring System, Robert R. Mason, Jr. and D. Max Sheppard, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p366-375.

Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994,

0-7844-0036-9, 546pp.

A Gas Sampling System for Withdrawing Humid Gases From Deep Boreholes, Joseph P. Rousseau, William Thordarson and Mark A. Kurzmack, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p2139-2145.

Goals and Requirements for Scientific Lunar Rovers, Charles Meyer, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed. and Paul R. Klarer, ed.,

1994), p166-174.

Hot-Film Response in Three-Dimensional Highly Turbulent Flows, P. Prinos, (Fundamentals and Advancements Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p176-184.

In Situ Stress Determination Research Study, William G. Austin and Paul M. Thompson, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p2429-2436.

Innovative Instrumentation for a Physical Model of River Ice Transport, Johannes Larsen, Jon E. Zufelt and Randy D. Crissman, (Fundamentals and Advancements in Hy draulic Measurements and Experimentation, Clifford A.

Pugh, ed., 1994), p259-267.

Instrumentation and Testing of a Three Hinge Arch for Service Loads Increase, John Choros, Eduardo Ramirez and Vinaya Sharma, (Structures Congress XII, N. C.

Baker, ed. and Barry J. Loodno, ed., 1994), p1106-1111.
Instrumentation Needs and Possibilities: A Dialogue Between Suppliers and Users, Robert Ettema and Vito Latkovitch, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p539-540.

Lateral Foundation Deformations for a Marine Test Fill, Demetrious C. Koutsoftas, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1111-1123.

Locking Into Success, Brian H. Greene, Andrew Schaffer, Donald A. Bruce and John A. Gerlach, CE Apr. 94, p48-50.

Long-Term Monitoring of Civil Structures using Smart Structures Techniques, T. Russell Gentry, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1392-1402

Low-Cost Bridge Scour Measurements, J. D. Schall, J. R. Richardson and G. R. Price, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p114-118.

Mapping 2-D and 3-D Velocity Components in Circular Conduits Using an Electromagnetic Current Meter and a 5-Hole Pilot Probe, Joseph J. Orlins and Lawrence J. Swenson, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p53-61.

Measured Downdrag on Seven Coated and Uncoated Piles in New Orleans, Randall K. Bush and Jean-Louis Briaud, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and

Guy Y. Félio, ed., 1994), p1011-1027.

Measurement of Turbulent Properties in a Natural System, Jörg Imberger and Roger Head, (Fundamentals and Advancements in Hydraulic Measurements and Experimen-

vancements in tryarature measurements and experimen-tation, Clifford A. Pugh, ed., 1994), p1-20. Mechanisms of Shaft Friction in Sand from Instrumented Pile Tests, B. M. Lehane, R. J. Jardine, A. J. Bond and R. Frank, GT Jan. 93, p19-35.

A Method for Locating Spikes in a Measured Time Series, James P. McKinney, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p388-393.

A Modern Electric Stepgauge for Accurate Wave and Tide Measurement, Harmen C. Botma and John B. Leenhouts, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p708-

Monitoring Gravel Movement Using Radio Transmitters, Edward F. Chacho, Jr., William W. Emmett and Robert L. Burrows, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p785-

NDE for Steel Bridges, Steven B. Chase, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1203-1208.

New Acoustic Meter for Measuring 3D Laboratory Flows, Nicholas C. Kraus, Atle Lohrmann and Ramon Cabrera,

HY Mar. 94, p406-412. A New Basic Principle for a New Series of Hydraulic Measurements. Erosion by Abrasion, Corrosion, Cavitation and Sediment Concentration, Lucien Chincholle, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p301-310.

New Techniques for Experimental Studies for Dredged Material Dispersion, Philip J. W. Roberts, Adrian Ferrier and B. H. Johnson, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1192-1200.

Optical Methods for Sediment-Laden Flows, R. N. Parthasarathy and M. Muste, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p223-232.

Passive Earth Pressures with Various Wall Movements,

Yung-Show Fang, Tsang-Jiang Chen and Bin-Ferng Wu, GT Aug. 94, p1307-1323.

Performance Summary of the Tanque Verde Project-Geogrid Reinforced Soil Retaining Walls, James G. Col-lin, Donald G. Bright and Ryan R. Berg, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p43-56.

Piezometer Performance at Wildlife Liquefaction Site, California, T. Leslie Youd and Thomas L. Holzer, GT June 94, p975-995.

Real-Time Data Collection of Scour at Bridges, David S. Mueller and Mark N. Landers, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p104-113.

Results of Prototype Borehole Instrumentation at the Hy-drologic Research Facility, Area 25, NTS, Joseph P. Rousseau, Mark Kurzmack and Alison Greengard, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2764-

Sediment Measurement Instrumentation A Personal Perspective, E. V. Richardson, (Fundamentals and Advancements in Hydraulic Measurements and Experimen-

tation, Clifford A. Pugh, ed., 1994), p94-103.
Sensors and Techniques for Structural Monitoring, R. D. Marshall, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1379-1384.

Settlement Measurements of 50-ft High Embankments at the Chesapeake & Delaware Canal Bridge, Ed Brylawski, Poh C. Chua and Edward S. O'Malley, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1149-1163.

Settlement of Building Foundations on Clay Soil Caused by Evapotranspiration, Vincent Silvestri and Claudette Tabib, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1494-1504.

Silent Inspector - An Aid to Dredge Inspection, James Rosati, III and Timothy L. Welp, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p756-763.

A Sonobuoy-Sized Expendable Air-Deployable Directional Wave Sensor, Marshall D. Earle, Ralph H. Orton, Harry D. Selsor and Kenneth E. Steele, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p302-315.

Strong-Motion Data Processing, A. Gerald Brady and April M. Converse, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1600-1605.

Temporary Shoring Support Systems in an Urban Environ-ment, John E. Reinfurt, Thomas C. Anderson, Paul Reitz and Tony Licari, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p24-42.

Tracking and Steering Systems in Trenchless Construction, R. Tanwani and D. T. Iseley, CO Mar. 94, p65-76.

Uncertainty Analysis of Dredge-Production Measurement and Calculation, Stephen H. Scott, WW Mar./Apr. 93, p193-203.

An Update on Dredge Instrumentation and Automation, Arie Korevaar, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p764-775.

The Usefulness of Stone Columns to Reduce Settlements and Distortions - A Case History, Enrico Brignoli, Angelo Garassino and Pietro Renzo, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p561-570.

Velocity Measurements by the "One-Orange Method", B. A. Christensen, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p76-85.

Vessel Positioning, Survey Controls and Dredge Monitor-ing Systems, George P. Bonner, Cary B. Cox, Barry W. McCleave and Monroe B. Savage, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p28-37.

All-Risk Policy Offers No Protection Against Alleged Negligence, CE Oct. 94, p27

Assessment of Building Damage Sustained During Hurricane Iniki (Comparison with Hurricane Iwa), Michael K. H. Yee and Arthur N. L. Chiu, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p102-110.

Catastrophic Hurricanes May Become Frequent Events in Caribbean and Along the United States East and Gulf Coasts, Robert C. Sheets, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p37-51

Court Upholds the Denial of Contractor Damages, CE Feb.

Critique: Rebuilding and Recovery, Ben L. Sill, (Hurri-canes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p300-302.

Knowledge-Based System for Wind Damage to Buildings. Rishor C. Mehta, Douglas A. Smith and Ronald H. Cheshire, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p726-735.

Redefining the Roles Insurers and Engineers Play in Hurricane Preparedness and Mitigation, Eugene L. Lecomte, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad So-

tani, ed., 1994), p1-9.

Relationship Between Residential Insurance Losses and Wind Conditions in Hurricane Andrew, Peter R. Sparks and Shiraj A. Bhinderwala, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p111-124.

Reversal of Fortune in Design-Build Terms, CE Mar. 94. p19-20.

Using Pen Computers in Post-Disaster Insurance Claim Settlements, Raja R. A. Issa, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2145-2148.

Intake structures

Selective Withdrawal Using Circular, Partly Submerged Intake Structures, James J. Sharp and T. M. Parchure, HY May 93, p615-627.

A Better Description of Trap Efficiency for Fine Sediment in Horizontal Settling Basins, Shaohua Marko Hsu and Wei-Sheng Yu, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1186-1192

A Fish Bypass Screen at Puntledge Project, Herbert Louie, John Taylor and Larry J. Swenson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p442-446.

An Improved Design of Excluding Sediment into River Intake Structures, Wu-Sung Ke, Sue-Jen Wu and Cheyuan Huang, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1193-

Numerical Modeling for Sediment-Pass-Through Operations of Reservoirs, Howard H. Chang, Larry L. Harrison, Wing Lee and Scott Tu. (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1014-1019.

Selective Withdrawal Using Circular, Partly Submerged Intake Structures, James J. Sharp and T. M. Parchure, HY

May 93, p615-627.

Velocity of Air-Core Vortices at Hydraulic Intakes, John E. Hite, Jr. and Walter C. Mih, HY Mar. 94, p284-297.

Integral equations

Integral Equation Model for Wave Propagation with Bottom Frictions, Philip L.-F. Liu and Yong-Sik Cho, WW Nov./Dec. 94, p594-608.

Variability Response Functions of Stochastic Plane Stress/ Strain Problems, Friedrich J. Wall and George Deodatis, EM Sept. 94, p1963-1982.

Intelligent vehicle highway systems

Breakout Session 6B: IVHS, Haitham Al-Deek and Michael Meyer, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p162-163.

Electronic Yellow Pages for Pre-trip Planning Systems, Prasuna DVG Reddy, Ryuichi Kitamura and Paul P. Jovanis, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1516-1523.

Emission Impacts of Intelligent Vehicle Highway Systems, Simon Washington, Randall Guensler and Daniel Sperling, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p118-138.

Evaluation Framework for IVHS, Hong K. Lo, Arun Chatterjee, Frederick Wegmann, Stephen Richards and Ajay K. Rathi, TE May/June 94, p447-460.

Smart Highways Graduate to Next Class, CE Oct. 94, p24.

Systems-Level Evaluation of Automated Urban Freeways Robert A. Johnston and Raju Ceerla, TE Nov./Dec. 94, p877-896.

Interaction diagrams

Concrete Columns Reinforced with Fiber Reinforced Plastic Rebars, Saeed Daniali and Noel S. Paramanantham, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p567-574.

Exploring Management Alternatives with Interactive Simu xpioring Management Alternatives with interactive simulation, David I. Leib and Thomas C. Stiles, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p210-213.

Interactive Models for the Regulation of Lake Ontario, Anthony J. Eberhardt, (Hydraulic Engineering '94, George . Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p105-109.

Interactions

The Body Language of Tensile Structures, Todd Dalland, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p990-999

Dynamic Interaction of Bridge and Moving Loading, A. Al-Sewaadi and A. Fafitis, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla,

1993), p77-93.

Dynamic Stress Intensity Factor for Subsurface Inclined Cracks, Chien-Ching Ma and Szu-Kuzi Chen, EM Mar. 94, p483-498.

Effects of Process Zones on Crack Interactions, K. R. Shah, J. F. Labuz and H. K. Stolarski, EM Dec. 94, p2678-

Equilibrium-Range Spectrum of Waves Propagating on Currents, Kyung Duck Suh, Yoo-Yin Kim and Dong Young Lee, WW Sept./Oct. 94, p434-450.

Fracture-Matrix Interaction in Topopah Spring Tuff: Experiment and Numerical Analysis, Robert J. Glass, Vince C. Tidwell, Alan L. Flint, William Peplinski and Yvette Castro, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994). 1994), p1905-1914.

High-speed Video Analysis of Sediment-Turbulence Inter-action, Yarko Niño, Fabián López and Marcelo García, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p213-222

Inelastic Bending and Torsion of Steel I-Beams, Yong Lin Pi and N. S. Trahair, ST Dec. 94, p3397-3417

Integrated Analytical Procedure for Concrete Slabs Under Impact Loads, Ayaho Miyamoto, Michael William King and Manabu Fujii, ST June 94, p1685-1702

Integrated Spacecraft Environments Model (ISEM), Ray Rantanen and Tim Gordon, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p609-617.

The Interactive Process: A Formal Means to Improved Relations, Allen Benson, A. C. Robison, Paul E. Seidler and Michelle D. Ulick, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p56-62.

Localization Analysis of Nonlocal Model Based on Crack Interactions, Milan Jirásek and Zdeněk P. Bažant, EM

July 94, p1521-1542.

Model for Constructability Approach Selection, John G. Gugel and Jeffrey S. Russell, CO Sept. 94, p509-521.

Novel Design Algorithms for K Factor Calculation and Beam-Column Selection, N. Agbayani, P. Jayachandran and D. Sriram, ST Dec. 93, p3630-3648.

Propagation of Linear Gravity Waves Over Slowly Varying Depth and Currents, Francisco J. Rivero and Agustín S.-Arcilla, (Ocean Wave Measurement and Analysis, Or-ville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p518-532

Rectangular Thick Plate with Free Edges on Pasternak Foundation, X. P. Shi, S. A. Tan and T. F. Fwa, EM May

Simplified Dynamic Analysis for Gravity Dams, A. Ghobarah, Ahmad El-Nady and Tarek Aziz, ST Sept. 94, p2697-2716.

Stability Analysis for Multilayered Rubble Bases, Wojciech Sulisz, WW May/June 94, p269-282.

Tributary Loading with a Terrain Following Coordinate System, David P. Podber and Keith W. Bedford, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p475-488.

Wave Runup on and Wave Reflection from Coastal Structures, John P. Ahrens, William N. Seelig, Donald L. Ward and William Allsop, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael

Hemsley, ed., 1994), p489-502.

Waves Propagating on an Adverse Jet, Fredric Raichlen, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p657-

Interactive graphics

MoveCapPlan: In Integrated System for Planning and Controlling Construction Material Laydown and Handling, I. D. Tommelein, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1172-1179.

A Multimedia Learning Environment for Statics, Siegfried M. Holzer and Raul H. Andruet, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994),

p308-314

Strut-Tie Model Design of Disturbed Regions in Concrete Structures, Y. M. Yun, A. Alshegeir and J. A. Ramirez, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p233-238.

Using Interactive Simulation to Explore Drivers' Response to Visual Information Systems, Jeffrey L. Adler, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1735-1742.

WATSUP: A Simulation Model for Water Supply Cost and Reliability, Mark R. Jensen and Jay R. Lund, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p806-

Interactive systems

Assembly of Simulation Networks Using Designs, Plans, and Methods, I. D. Tommelein, R. I. Carr and A. M. Odeh, CO Dec. 94, p796-815.

Database Integration in Support of Construction Management, A. B. Cleveland, Jr. and J. F. Skolnick, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

Implementation of an Object-Oriented Knowledge Representation Scheme for the Development of an Intelligent CAD Interface, Nabil Kartam, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1772-1778.

Integrated Building Design Systems in Context of Product Data Technology, Godfried Augenbroe, CP Oct. 94,

p420-435.

An Interactive Computer Code for Generations of Artificial Earthquake Records, D. L. Karabalis, G. J. Cokkinides, D. C. Rizos, J. S. Mulliken and R. Chen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1115-1122.

Interactive Cost Estimating During Design, Robert I. Carr, Hyun-Soo Lee and Photios G. Ioannou, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p1556-1563.

An Interactive Regional Regression Approach to Estimating Flood Quantiles, Gary D. Tasker and Raymond M. Slade, Jr., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p782-785.

MDA Planner: Interactive Planning Tool Using Product Models and Construction Methods, Adina Jägbeck, CP

Oct. 94, p536-554.

Multimedia in Civil Engineering, Jorge A. Vanegas and Nelson C. Baker, CE May 94, p71-73.

Role of Advanced Computer Technology in Construction Industry, Roger M. Henry, CP July 94, p385-389. Streamlining Project Estimating and Scheduling, David

Angelotti, CC Feb. 94, p11-13.

Technology Framework for Computer-Integrated Con-struction, Paul Teicholz and Martin Fischer, CC Feb. 94, p1.9-11.

Interagency cooperation

Dioxin Capping Management and Monitoring Program: Design and Implementation, Brian May, Douglas Pabst and Scott McDowell, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1027-1036.

Evolution of Beneficial Uses of Dredged Materials for Over 200 Million Cubic Yards of Dredged Material in Galveston Bay, Texas Part II - Framework & Approach, Mike Jansky, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p843-846.

Five Year Implementation Retrospective on the Puget Sound Dredged Disposal Analysis Program (PSDDA), David Kendall, David Fox, Stephanie Stirling, Maria Peeler, Gene Revelas, Phillip Hertzog, Justine Barton and John Malek, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1527-1553.

Formulation of the Interagency Coordination Team for the Houston-Galveston Navigation Channels, Texas Project, Dalton H. Krueger, (Dredging '94, E. Clark McNair, Jr.,

ed., 1994), p378-383.

Holistic Approach to Irrigation Management in Developing Countries, Phillip Z. Kirpich, IR Mar./Apr. 93, p323-333

Site Selection for Beneficial Uses Of Dredged Material in Galveston Bay, Texas, USA, Russell Swafford and Richard F. Gorini, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p399-409.

Intercepting sewers

Interceptor Inspection and Rehabilitation Program, William A. Macaitis and Amreek Paintal, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p123-142.
Trenchless Relief, Tad Pilecki, Stephen J. Klein and Art

Hamid, CE Jan. 94, p58-60.

Interconnected systems

The Integrated Systems Approach to Facilities Manage-ment, Robert A. Snodgrass, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2199-2207.

RATAS Project-Developing an Infrastructure for Computer-Integrated Construction, Bo-Christer Björk, CP Oct. 94, p401-419.

Strategy for Computer Integrated Construction Technology, Paul Teicholz and Martin Fischer, CO Mar. 94, p117-131.

Interface shear

Dynamic Interface Shear Strength Properties of Geomembranes and Geotextiles, M. K. Yegian and A. M. Lahlaf, GT May 92, p760-779.

Accurate Estimation of Interface Shear Stresses in Composite Masonry Walls, Subhash C. Anand and M. Ayubur Rahman, ST Mar. 94, p998-1015.

ARC/HEC2: an ARC/INFO - HEC-2 Interface, Dean Djokic, Mark A. Beavers and Chandrashekar K. Deshakulakarni, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p41-44.

Behaviour of Concrete Masonry Infill - Steel Frame Structures, J. L. Dawe and C. K. Seah, (Analysis and Computation of Concrete Masonry Infill - Steel Frame Structures, J. L. Dawe and C. K. Seah, (Analysis and Computation of Concrete Masonry Infill - Steel Frame Structures, J. L. Dawe tation, Franklin Y. Cheng, ed., 1994), p67-76.

Characterization of Cement-Aggregate Interfaces by Electrical Conductivity Methods, Xie Ping and J. J. Beaudoin, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p15-25.

Constitutive Theory of Interface Behavior in Quasi-Brittle Materials, H. Y. Yang and Ming L. Wang, EM Dec. 94, p2588-2603.

Human Extender: A Material Handling System, H. Kazerooni, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p37-43.

Integration of Water Quantity and Quality Planning, Luiz G. Azevedo, Timothy K. Gates and Darrell G. Fontane, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p388-391.

Interface Shear Stress in Overlaid Concrete Pavements, C. M. Lau, T. F. Fwa and P. Paramasivam, TE Mar./Apr. 94, p163-177.

Interface Shear-Strength Properties of Roughened HDPE, Marc E. Orman, GT Apr. 94, p758-761.

Interfaces Between Transport and Geologic Disposal Systems for High-Level Radioactive Wastes and Spent Nutems for Fign-Level Radioactive wastes and Spent Nu-clear Fuel—A New International Guidance Document, R. B. Pope, K. W. Han, T. Pollog, L. Baekelandt, D. Blackman, J.-M. Hoorelbeke and J. E. Villagran, (*High* Level Radioactive Waste Management, High Level Ra-dioactive Waste Program Committee, 1994), p1229-1236

Landfill Liner Interface Strengths from Torsional-Ring-Shear Tests, Timothy D. Stark and Alan R. Poeppel, GT

Mar. 94, p597-615.

Microstructure of the Paste - Aggregate Interface, Includ-ing the Influence of Mineral Additions, J. P. Ollivier and M. Massat, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p175-185.

Mineral Admixtures: Reactions, Micro-Structure and Macro-Properties, Jan Bijen and Hans Pietersen, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p292-328

New Formulation for Elastic Modulus of Fiber-Reinforced, Quasibrittle Matrices, Jamil M. Alwan and Antoine E. Naaman, EM Nov. 94, p2443-2460.

Nonlinear Analysis of Two-Layered Wood Members with Interlayer Slip, Dan L. Wheat and Jose M. Calixto, ST June 94, p1909-1929.

A Real-Time Graphical Interface to a Two-Dimensional Groundwater Flow and Mass Transport Model, Robert C. Speake, Jr. and Kay S. Capps, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2081-

Size Effect in Fiber or Bar Pullout with Interface Softening Slip, Zdeněk P. Bažant and Rodrigue Desmorat, EM

Sept. 94, p1945-1962

Tests for Flow along Vertically Stratified Porous-Media Interfaces, Ronald B. Manila, Jr. and J. Jeffrey Peirce, EE May/June 94, p527-542.

Interfacial tension

Evaluating Concrete Mesoscale Properties Using Neural Networks, John E. Bolander, Jr., Toshihiro Ebihara and Hiroshi Hikosaka, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p475-482.

Interferometry

An' Inflatable Antenna for Space-Based Low-Frequency Radio Astronomy, John P. Basart, Shreekanth A. Mandayam and Jack O. Burns, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1390-1399

Laser Generation and Detection of Ultrasound in Concrete, Laurence J. Jacobs, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1328-1333.

Low Frequency Radio Astronomy from Earth or Lunar Orbit, Jack O. Burns, John P. Basart and Bernard M. McCune, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1400-1409.

Mechanical Behavior of Dowels Embedded in Concrete, Luigi Biolzi and Natalino Gattesco, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p630-635.

A Study of Communication Signal Leakage Through the Earth's Ionosphere Using Ray-Tracing Techniques, M. McCoy and J. P. Basart, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p553-561.

Internal forces

Unified Formulation for Analysis of Slopes with General Slip Surface, R. D. Espinoza, P. L. Bourdeau and B. Muhunthan, GT July 94, p1185-1204.

Internal pressure

Atmospheric Pressure within Lunar Structure, Paul S. Nowak, Jeffrey Janakus and Charles E. Mitchell, AS Oct. 94, p398-410.

Cone-Cylinder Intersection under Pressure: Axisymmetric Failure, Jin-Guang Teng, EM Sept. 94, p1896-1912. Critique on Building Envelope Sessions, Peter R. Sparks, (Hurricanes of 1992: Lessons Learned and Implications

for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p529-532.

Plastic Collapse at Lap Joints in Pressurized Cylinders under Axial Load, Jin-Guang Teng, ST Jan. 94, p23-45. Shakedown Analysis of Hollow Spheres, Wei Jiang, EM

July 94, p1447-1480.

Wind Tunnel Testing of High-Rise Residential Buildings in Hurricane Areas, Peter A. Irwin, Mark A. Hunter, Mark Mosbat and Sanjeev M. Shah, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p663-673.

Internal waves

A Numerical Study of Hydraulic Jump and Mixing in a Stratified Channel With a Sill, Ping Chen, R. Grant Ingram and Jianping Gan, (Estuarine and Coastal Model-Ing III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swan-son, ed., 1994), p119-133.

Simple Internal Waves and Bores, J. Bühler, HY May 94, p638-645.

Wave Interaction with Fluid Mud in Rectangular Trench, Francis C. K. Ting, WW Mar./Apr. 94, p154-178.

International commissions

World Bank Update: In Deep Water, Francois M.I. Lampietti, WP Special issue 94, p26-30.

International compacts

Black & Veatch in Unique Overseas Partnership, CE Jan. 94, p12-13. Understanding ISO, Virginia Fairweather, CE Feb. 94,

International development
Building the Urban Environment, Candace Port-Hull, WP
Spring 94, p41-42.

Doing Business in...Bolivia, Capitalizing on foreign interest, WP Spring 94, p23-25.
Engineering Sustainable Development, John Prendergast, CE Oct. 93, p39-42.

Engineers and Contractors Go Global, Brian J. Lewis, WP Special issue 94, p20-24. Information, Global-Style, Javier A. Baldor, WP Spring 94,

Leading Creative People as Consulting Engineering Be-comes Globalized, Brian J. Lewis, ME Mar./Apr. 94.

p39-43. OECD spotlight on bribery, WP Spring 94, p2. The Road to New Construction Markets, CE Sept. 94, p8.

A Suggested International Classification of Marinas, Jon Guerry Taylor, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p140-143.

Sustainable Development Issues: Industry, Environment, Regulation and Competition, George L. De Feis, El Apr. 94, p177-182.

Visa advice, WP Spring 94, p4. World Bank Charts a New Course for Water-Resources Management, CE Jan. 94, p24-25.

World Bank Update: In Deep Water, Francois M.I. Lampietti, WP Special issue 94, p26-30.

International factors

Argentina outlook, WP Spring 94, p4. CERF's Corporate Board Adds New Categories, CE Jan. 94, p77.

Construction Competition and Competitive Strategies, Janet K. Yates, ME Jan./Feb. 94, p58-69.

Female factor, WP Spring 94, p2,4.

For O'Neil's Firm, China Trip Could Be the Start of Something Big, NE Oct. 94, p15.

Gypsum Plant Registers Under ISO, CE Dec. 94, p8. Ho Chi Minh beachheads, WP Spring 94, p2.

Infrastructure advice, WP Spring 94, p4.
Integrated Planning for International River Basin, Alvin S.
Goodman, (Hydraulic Engineering '94, George V.
Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p130-134.

An International Approach to Radioactive Waste Manage-ment, John W. Bartlett, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p26-29.

International Expansion, Ethics, and Prohibited Foreign Trade Practices, A. L. Barco, ME Sept./Oct. 94, p34-40. International Information and Technology Transfer, Charles G. Gunnerson, El Oct. 91, p336-350.

The Iran Market, WP Special issue 94, p5.

Labor-Political Factors for International Firms in Develop ing Regions, Enno "Ed" Koehn and Frank Atuahene, EI Jan. 94, p41-49.

Metrication in the U.S.? The World is Waiting (ltr), CE

Oct. 94, p29-30.

Mexican mariages, WP Spring 94, p2. More on Mexico, Vietnam, WP Spring 94, p4. New Cop on the Block, WP Special issue 94, p2. OECD spotlight on bribery, WP Spring 94, p2.

On Getting Paid, WP Special issue 94, p5.

Pounds, Kilos and Newtons, Everett L. Boyd, CE Sept. 91, p72-73.

Privatization risks, WP Spring 94, p4.

Cualification System for Building Engineers in Japan, Katsumi Yano, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p211-214. Visa advice, WP Spring 94, p4.

International treaties

Space Policy: Key Points of International Law, Victor Timmons and Teresa Laguatan, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p815-819.

Architectural Interns Get Medical Treatment, ME July/ Aug. 94, p11-12 Summers Jobs for CE Students Combine Infrastructure Re-

search with Industrial Internships, CE Feb. 94, p69.

Equivalent Differential Equations in Fixed-Grid Characteristics Method, Mohamed S. Ghidaoui and Bryan W. Karney, HY Oct. 94, p1159-1175.

Intersections

Cone-Cylinder Intersection under Pressure: Axisymmetric Failure, Jin-Guang Teng, EM Sept. 94, p1896-1912.

Neural Network for Gap Acceptance at Stop-Controlled In-tersections, Prahlad D. Pant and Purushothaman Balak-

rishnan, TE May/June 94, p432-446.

Study of Stress Concentrations at the Intersection of Undeground Chambers for the Superconducting Super Collider Project, Fwu-Ding (Kim) Lin, Lichu Guan and Steven Baldauf, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1975-1982.

Interstate highways

DOT Unveils Proposed National Highway System, CE Feb. 94, p98.

Trash Creates the Sound Wall of Silence, CE Sept. 94, p8. Warning System Will Report Low Visibility to Drivers, ET Dec. 94/Jan. 95, p7.

Intrusion

Gully Potential in Soil-Covered Uranium Waste Impoundments, Steven R. Abt, Christopher J. Pauley, Scott A. Hogan and Terry L. Johnson, EY Aug. 94, p51-66.

Inventories

2D Bar-Code Applications in Construction, Bob G. McCullouch and Kamolwan Lueprasert, CO Dec. 94,

A Comprehensive Bridge Management System for Illinois, Allen R. Marshall, Todd Ahrens and Paul D. Thompson, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1859-1866.

Database Use in the Engineering Office, Charles E. Bowler, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p1874-1879.

Maintenance Management Systems for Urban Drainage, Neil S. Grigg, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilita-tion Programs and Techniques, ASCE, 1994), p2-10. NEPA Implementation: The Department of Energy's Program to Manage Spent Nuclear Fuel, Dillard B. Shipler, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1532-1537.

Nuclear Arms Reduction, Nuclear Proliferation and High-Level Radioactive Waste Management, Daniel B. Bullen and James M. McCormick, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p30-39.

Paper Summary Inventory Assessment of DOE Spent Nu-clear Fuels, David G. Abbott, Alan R. Bringhurst and Denzel L. Fillmore, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p320-330.

Public Opinion Polling and the Yucca Mountain Controversy: A Seven Year Inventory (12/86–8/93), Jeffery J. versy: A Seven tear inventory (1200-093), select 1. Himmelberger and Mike L. Baughman, (*High Level Radioactive Waste Management*, High Level Radioactive Waste Program Committee, 1994), p142-149.

Investment return analysis

Computer Benefits Can't be Measured by Productivity Alone, ME May/June 94, p1-2.

Clinton Administration's Investment Budget for FY1995, CE Apr. 94, p128.

Computer Benefits Can't be Measured by Productivity Alone, ME May/June 94, p1-2

Ho Chi Minh beachheads, WP Spring 94, p2. Mexican marriages, WP Spring 94, p2.

Mixed-Use Business Park Developments in Space: A Real-Estate Paradigm, Charles J. Lauer, Joseph P. Hopkins, Hugh M. Kelso, Brent Sherwood and Dana G. Andrews, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1471-1481.

More Funding for R & D Needed in FY 1995 Budget, NE Apr. 94, p1,3.

Technology Development and Transfer in Environmental Management, Jonathan Katz, Alan Karnovitz and Martin Yarbrough, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p314-7-314-12.

Pavement Renovation with HPI Electrochemical Method, Roland S. Jary, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p643-

Contraction Scour at a Bridge over the Iowa River, Edward E. Fischer, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p31-35. Iowa Paves an Information Highway, CE June 94, p27.

Second Life for Spent Sand, CE Oct. 94, p8.

The Iran Market, WP Special issue 94, p5.

Comparison of Biological and Chemical/Physical Iron Removal, Charlotte D. Smith and James F. Smith, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p74-81.

Recovery and Recycling of Copper from Wastewater using Iron Coated GAC, Kotha P. Reddy, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p392-399.

The Relationship of Speciation to Iron and Manganese Removal Strategies, Kenneth Carlson, William Knocke and Kevin Gertig, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p66-73.

Iron compounds

Evaluation of Fe oxide-coated GAC for removal and re-covery of Cu(II) from water, T. C. Wang, K. P. Chandra and P. R. Anderson, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p225-232.

The Use of Iron Salts to Control Dissolved Sulfide in Districts' Trunk Sewers, Navnit A. Padival, William A. Kimbell and John A. Redner, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p743-750.

Irregular boundaries

Irregular Wave Run-Up on Composite Rough Slopes, Marek Szmytkiewicz, Ryszard B. Zeidler and Krystian W. Pilarczyk, (*Coastal Dynamics '94*, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p599-613.

Agricultural Infrastructure for Urban Irrigation, D. Heinert, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p339-342.

Alfalfa Irrigation During Drought, J. C. Guitjens, IR Nov./

Dec. 93, p1092-1098.

The Application of Streamflow Duration Curves in Water Resources Engineering, Richard M. Vogel and Neil M. Fennessey, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p201-204

Command Area Water Demands. II: Water-Demand Func-tion, Seigo Yamashita and Wynn R. Walker, IR Nov./

Dec. 94, p1043-1055.

Defining and Using Reference Evapotranspiration, George H. Hargreaves, IR Nov./Dec. 94, p1132-1139.

Design of Agricultural Drainage with Adaptive Irrigation Management, Luis A. Garcia, Kenneth M. Strzepek and Terence H. Podmore, IR Jan./Feb. 94, p179-194.

Effect of Saline Irrigation Water on Tree Growth, Ghulam Hussain and Otto J. Helweg, IR Sept./Oct. 94, p970-978.

Effects on River Mechanics Due to Reduction in Low-Season Discharge, E. V. Richardson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p115-119.

Environment-Irrigation Trade-Offs and Risks, Norman J. Dudley, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p280-294.

Expert Analysis in Regulated Irrigation Canal Modelling, Forrest M. Holly, Jr. and John P. Parrish, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p92-96.

Flow Capacity through Wide and Submerged Vegetal Channels, M. W. Abdelsalam, A. F. Khattab, A. A. Khalifa and M. F. Bakry, IR Sept./Oct. 92, p724-732.

Holistic Approach to Irrigation Management in Developing Countries, Phillip Z. Kirpich, IR Mar./Apr. 93, p323-

Infiltration-Advance Equation for Finite Linear Source, William O. Rasmussen, IR July/Aug. 94, p796-812.

Momentum Model of Flow Past Weir, Amruthur S. Ramamurthy, Ngoc-Diep Vo and German Vera, IR Nov./Dec. 92, p988-994.

Optimization Analysis of Deficit Irrigation Systems, Francesco Mannocchi and Pompeo Mecarelli, IR May/June 94, p484-503.

Probabilistic Characterization of Droughts, G. V. Loganathan, S. Mostaghimi, V. K. Lohani and M. K. Tchaou, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p197-200.

Using the Weir Back as an Energy Dissipator, Abdelkawi Khalifa, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p436-

Irrigation efficiency

Canal-Control Needs: Example, A. J. Clemmens, G. Sloan and J. Schuurmans, IR Nov./Dec. 94, p1067-1085.

Method for Estimating Efficiency in Spanish Irrigation Systems, Wolfgang Krinner, Angel García and Federico Estrada, IR Sept./Oct. 94, p979-986.

Methods and Economics of Drainage Reduction Through Improved Irrigation, Blaine R. Hanson and Allan E. Fulton, IR Mar./Apr. 94, p308-321.

Monitoring Water Quality and Use in Colorado, Henriette Emond, Jim C. Loftis, Terence Podmore and Forrest Leaf, (Water Policy and Management: Solving the Prob-lems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p343-346.

Reclamation and Water Conservation, Craig R. Phillips, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p573-576.

Irrigation practices

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Bromide Transport under Sprinkler and Ponded Irrigation, M. Hamdi, D. Durnford and J. Loftis, IR Nov./Dec. 94, p1086-1097

Design Considerations for Night Storage in Irrigation Systems, Wadie F. Mankarious, (Water Policy and Manage-ment: Solving the Problems, Darrell G. Fontane, ed. and

Harry N. Tuvel, ed., 1994), p331-334.

Methods and Economics of Drainage Reduction Through Improved Irrigation, Blaine R. Hanson and Allan E. Ful-

ton, IR Mar./Apr. 94, p308-321.

Irrigation programs
Governmental Priorities in Irrigation Project Selection in Indonesia, Sutardi and I. C. Goulter, WR May/June 93, p406-411.

Irrigation scheduling

Design of Agricultural Drainage with Adaptive Irrigation Management, Luis A. Garcia, Kenneth M. Strzepek and Terence H. Podmore, IR Jan./Feb. 94, p179-194

Irrigation Timing for Wheat Based on Climate, Crop, and Soil Data, R. P. Tripathi, IR May/June 92, p370-381.

Irrigation systems

Automated Field Irrigation System Using Side Weirs, R. Singh and T. Satyanarayana, IR Jan./Feb. 94, p48-59. Canal-Control Needs: Example, A. J. Clemmens, G. Sloan

and J. Schuurmans, IR Nov./Dec. 94, p1067-1085. Command Area Water Demands. I: Validation and Calibra-

Command Area water Definances. It vanisation and Cannot ment: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p331-334.

Downstream Control Algorithm for Irrigation Canals, Fubo Liu, Jan Feyen and Jean Berlamont, IR May/June 94,

p468-483.

Incorporating Economic Analysis in Irrigation Design and Management, Ujjayant Chakravorty and James Management, Ujjayant Roumasset, WR Nov./Dec. 94, p819-835.

Method for Estimating Efficiency in Spanish Irrigation Systems, Wolfgang Krinner, Angel García and Federico Estrada, IR Sept./Oct. 94, p979-986.

Methods and Economics of Drainage Reduction Through Improved Irrigation, Blaine R. Hanson and Allan E. Ful-

ton, IR Mar./Apr. 94, p308-321. Wastewater Reclamation at Davenport, Washington, Douglas L. Smith, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuv-

el, ed., 1994), p834-837. Water Conservation and Delivery Flexibility in the Imperi-al Irrigation District Through Lateral Interceptor Sysai Irrigation District Inrough Lateral interceptor Sys-tems, Eduardo A. Latimer, Robert W. Charley, Todd Hunziker, Andrew A. Keller and Doug Welch, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p335-338

Water Infrastructure Risk Ranking and Filtering Method, Tomas Dolezal, Yacov Y. Haimes and Duan Li, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p56-72.

Agroforestry Drainage Management Model: II: Field Water Flow, F. F. Karajeh and K. K. Tanji, IR Mar/Apr. 94, p382-396.

Deformation of Fill Slopes Caused by Wetting, Iraj Noorany, Joel A. Sweet and Ian M. Smith, (Stability and Performance of Slopes and Embankments II, Raymond B. Seed, ed. and Ross W. Boulanger, ed., 1992), p1244-1257.

Using Geographical Information Systems to Manage a Multipurpose Water Project, Stan B. Mattingly, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p33-36.

Construction of an Island, Brendan Bambrick, CO Mar. 94, p223-227.

An Offshore Island Wave Sheltering Model, Andrew L. Kadib, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p695-707.

Seismic Isolation Retrofit of Existing Bridges, Ronald L. Mayes, Deepak Choudhury, Robert S. Crooks, David M. Jones and Richard P. Knight, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1179-1186.

Seismic Response Control of Bridges by Variable Dampers, Kazuhiko Kawashima and Shigeki Unjoh, ST Sept. 94, p2583-2601.

Composite Sorption of Pure Vapors on Polyolefins, Car-bon, and Minerals, Benito J. Mariñas and Ren-An Li, EE Sept./Oct. 94, p1207-1229.

Liquid Infiltration Through the Boiling-Point Isotherm in a Desiccating Fractured Rock Matrix, O. M. Phillips, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2189-2196.

Use of Expert Systems in Selecting Equilibrium Isotherms of Organic Compound Adsorption on Activated Carbon, Imad A. Basheer and Shrinath Kotdawala, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p640-643.

Inferences of Paleoenvironment From Petrographic, Chemical and Stable-Isotope Studies of Calcretes and Fracture Calcites, David T. Vaniman and Joseph F. Whelan, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2730-2737.

Isotope Systematics in Ground Water and Hydrogenic Deposits at ASPO, Sweden, Bill Wallin and Zell E. Peterman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p2692-2701.

Isotopic Studies of Yucca Mountain Soil Fluids and Carbonate Pedogenesis, Ted A. McConnaughey, Joseph F. Whelan, Kimberley P. Wickland and Richard J. Moscati, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2584-2589.

Instotpic Tracers of Gold Deposition in Paleozoic Limestones, Southern Nevada, Z. E. Peterman, B. L. Widmann, B. D. Marshall, J. N. Aleinikoff, K. Futa and S. A. Mahan, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1904), 1316, 1323.

1994), p1316-1323.

Late Holocene Climate Derived From Vegetation History and Plant Cellulose Stable Isotope Records From the Great Basin of Western North America, Peter E. Wigand, Martha L. Hemphill and Sikha (Manna) Patra, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2574-2583

Molluscs as Climate Indicators: Preliminary Stable Isotope and Community Analysis, Saxon E. Sharpe, Joseph F. Whelan, Richard M. Forester and Ted McConnaughey, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p2538-2544.

Paleoclimatic and Paleohydrologic Records From Secondary Calcite: Yucca Mountain, Nevada, Joseph F. Whelan, David T. Vaniman, John S. Stuckless and Richard J. Moscati, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2738-2745.

Strontium Isotope Geochemistry of Soil and Playa Deposits Near Yucca Mountain, Nevada, Brian D. Marshall and Shannon A. Mahan, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2685-2691.

U-234/U-238 Ratio: Qualitative Estimate of Groundwater Flow in Rocky Flats Monitoring Wells, J. C. Laul, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2702-

Isotropic material

An Alternative Formulation of Volume-change Behavior of Soils, Sunirmal Banerjee and Kandiah Sribalaskandarajah, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p652-662.

Marina Ashdod, Israel - An Investor's Turn-Key Project Design, Rami Raviv, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p244-247.

Military Robots Revamped for Environmental Duty, CE Dec. 94, p23.

New Design and Construction of Marinas in Israel, Rami Raviv, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994).

Evaluation of the Return Period of the September 1992 Flood in Genova, Italy, Paolo Bartolini and Juan B. Valdés, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p102-106.

A Computational Algorithm for Analysis of Rectangular Footings Under Partial Contact with Soil, P. Rajendran, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p652-659.

Elasto - Plastic Analysis of Cable Net Structures, J. L. Meek, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p781-790.

Estimation of Directional Spectra by ML/ME-Methods, Ola Haug and Harald E. Krogstad, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p394-405.

Estimation of Pavement-Layer Moduli Using Nonlinear Optimization Technique, Mustaque Hossain, John Zaniewski and Subramaniam Rajan, TE May/June 94, p376-393.

IPA Phase 2 Sensitivity and Uncertainty Analysis, Virginia Colten-Bradley, Richard Codell and M. Rose Byrne, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1480-1491.

IPA Phase 2 Total System code and Scenario Analysis, James R. Park, Robert G. Baca, Norman A. Eisenberg, Ronald W. Janetzke and Budhi Sagar, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1461-1468.

Repository Program Licensing Approach, Thomas M. Wil-liamson and April VanCamp Gil, (High Level Radioac-tive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1585-1592.

Simple Method for Identification of Border Infiltration and Roughness Characteristics, John D. Valiantzas, IR Mar./ Apr. 94, p233-249.

Simple Numerical Method for Solving Horizontal Circular Curves, Said M. Easa, SU Feb. 94, p44-48.

Some Results from the Second Iteration of Total-System Performance Assessment for Yucca Mountain, Michael L. Wilson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1655-1662.

Using Performance Assessment for Radioactive Waste Disposal Decision Making—Implementation of the Method-ology into the Third Performance Assessment Iteration of the Greater Confinement Disposal Site, David P. Gallegos, Stephen H. Conrad and Thomas A. Baer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1671-

Jacking

Bantamweight Jack Gives Atlas Performance, CE Oct. 94, p86.

Japan

Analysis of Sand Movement on Noto Coast by Geochemical Method, Kazumasa Mizumura, Toshiharu Nishimoto and Takahiko Yamamoto, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p923-927.

Application of Fuzzy Logic in Civil Engineering in Japan, Hitoshi Furuta, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1900-1907.

Building the Perfect Ski Slope?, CE Mar. 94, p10.

Civil Engineering Undergraduate Education in Japan: Sys-tem Overview, Masanori Tsuji and Antonio Nanni, El Apr. 94, p135-144.

Clearing the Air with Japan, Germany, CE Feb. 94, p8.

Construction of Akashi-Kaikyo Bridge West Anchorage, Nobuaki Furuya, Reizou Yamaoka and Boyd C. Paulson, Jr., CO June 94, p337-356.

Construction of an Island, Brendan Bambrick, CO Mar. 94, p223-227.

Construction Process Innovation Through SMART Sys-tem, Yusuke Yamazaki and Junichiro Maeda, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p1583-1590. Core Message from PNC/H-3 and Key Issues for the Next Milestone, Sumio Masuda, Katsuhiko Ishiguro, Mikazu Yui and Tadashi Mano, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1501-1507.

Demands and Satisfiers for Automation and Robotics in Construction: Differences Between Japan and the United States, Hiroshi Saito and John G. Everett, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and

Paul R. Klarer, ed., 1994), p419-426.

Environmental Issues and Management of Concrete Waste in Japan, Yoichi Nojiri, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p424-437.

Exemplary Plans of a Fisharina in Japan, Takeshi Kawagu-chi, Hideki Hata and Yasuhiro Yoshizuka, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p211-221.

First Findings From CERF's Task Force to Europe, CE Mar. 94, p77.

Fisharina Policies in Japan, Noboru Oshima, Sanji Kida, Motobumi Manabe and Nobuo Mikami, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p201-210.

Harry Seed, Liquefaction & the Gravel Drain, Choule J. Sonu, Hiroshi Oishi and Katsuhiko Ito, CE Dec. 93,

n58-60

Infrastructure Management: U.S. and Japanese Systems Contrasted, Neil S. Grigg, UP Mar. 94, p1-13.

Japan Builds 21st Century Monuments, Charles R. Heidengren, CE Aug. 94, p57-59.

Liquefaction of Artificially Filled Silty Sands, Susumu Yasuda, Kazue Wakamatsu and Hideo Nagase, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p91-104.

Marine Recreation Project of the City of Yokohama - Marine Park and Hakkei Island -, Tohru Yano, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p577-586.

Microtunneling Creates Pipe Roof in Record Time, CE Sept. 94, p11.

No Time to Waste on Mexico Wastewater Project, CE Sept. 94, p21-22.

Numerical Model Verification on Tidal Current in Tokyo Bay, Yoshitaka Fukui, Toshio Kodama and Mutsuto Kawahara, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p880-884.

Planning and Improvement of Coastal Area Utilization, Masatsugu Fukuya, Junji Tanaka, Shigeki Nakamura, Toshiya Taneichi and Hideyuki Kida, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p222-231.

Reforming Japan's Public Works, Derek Dylan Bell, WP

Special issue 94, p6-9.

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Technological Advance in Japanese Building Design and Construction, Anthony C. Webster, 1994, 0-87262-932-5, 107pp.

U.S. / Japan Large Scale Cooperative Research Program for Steel Structures, Robert D. Hanson, (Structures Con-gress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p103-108

U.S., Japan Bridge Gaps in Culture and Construction Practice, ME Mar. JApr. 94, p1.

Water on Stone, Keri Wyatt Kent, WP Spring 94, p37-40. 'Repeat' Quakes May Cause Fewer Deaths, More Damage, CE Nov. 94, p19,21.

Jet diffusion

Local Scour Due to Submerged Horizontal Jet, S. S. Chat-terjee, S. N. Ghosh and M. Chatterjee, HY Aug. 94, p973-992.

Local Scour Potential for Large Bed Material with Shallow Tailwater Depth, Kwang-Ik Son and Gilberto E. Urroz, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1146-1150.

Sediment Concentration below Free Overfall, O. R. Stein and P. Y. Julien, HY Sept. 94, p1043-1059.

Jet Grouting Gains, Paul Tarricone, CE Dec. 94, p40-43. Safety Issue Boosts Record Soft Ground Jet-Grouting Job, CE Oct. 94, p18-19.

Comparison of Headcut Advance Testing and Soil Test Results, Gregory J. Hanson and Robinson. Kerry M., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p426-430.

Countercurrent Jet Device, Willi H. Hager, HY Apr. 94,

p504-517

Estimation of Spillway Free Jet Trajectory Lengths, Peter J. Rae and Diana Hurdowar-Castro, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p421-425

Plunge-Pool Scour by Inclined Jets, Assem M. Afify and Gilberto E. Urroz, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

p1040-1044.

Waves Propagating on an Adverse Jet, Fredric Raichlen, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p657-

Dredged Material Used in Sand-filled Containers for Scour and Erosion Control, Lee E. Harris, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p537-546.

Shoaling of Wave Spectra in Front of Reflective Structures, Ernest R. Smith and Steven A. Hughes, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p642-656. Use of a Modified Hybrid Model to Analyze the

Effectiveness of Jetties in Reducing Marina Sedimentation, S. Jarrell Smith and E. J. Hayter, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p543-547.

Job opportunities

Seminar Subjects Don't Target Profession's Problems (ltr), CE May 94, p38.

Deep Dig, Tight Squeeze, Joseph C. Clougherty, Richard F. O'Brien and Mark W. Pelletier, CE Aug. 94, p42-45. Federal Cleanups: Good News from Bad, Teresa Austin, CE Mar. 94, p48-51.

New Problems in Ground & Water Lease Administration, Allan D. Kotin and Faith F. Backus, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p154-161.

P3 for Marinas, Parks & Recreation, Richard Milbrodt, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p180-186.

Waterfront Renaissance Racine, Wisconsin, Thomas N. Wright, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p544-551.

Laints

AWS versus AIJ Tubular K-Connection Design Rules, Yoshiaki Kurobane and Kenshi Ochi, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p190-190.

Cyclic Behavior of Joints Between Steel Beams and Reinforced Concrete Columns, Ryoichi Kanno and Gregory G. Deierlein, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1137-1142.

Durability of Concrete Materials Under Pavement Joints, Stephen R. Munoz and Eddie Y. J. Chou, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1-7.

Durability of Steel/Composites Bonds for Rehabilitation of Structural Components, Pierre E. Bourban, Steven H. McKnight, Stacy B. Shulley, Vistasp M. Karbhari and John W. Gillespie, Jr., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p295-302.

Effect of Joint Rigidity on Buckling Strength of Single Layer Lattice Domes, Shiro Kato, Itaru Mutoh and Masaaki Shomura, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p469-478.

Empirical Mohr-Coulomb Failure Criterion for Concrete Block-Mortar Joints, M. Ayubur Rahman and Subhash C. Anand, ST Aug. 94, p2408-2422.

Enabler Chassis Features and Mobiltiy Analysis, James S. Hollinger, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p210-219.

Experimental Study on the Buckling Behavior of a Triodetic Aluminum Space Frame: No. 2 Ultimate Bearing Strength of a Single Layer Space Frame, Kenichi Sugizake and Shigeru Kohmura, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p479–488.

Guidelines for Design of Joints between Steel Beams and Reinforced Concrete Columns, ASCE Task Committee on Design Criteria for Composite Structures in Steel and Concrete, ST Aug. 94, p2330-2357.

Interface Model Applied to Fracture of Masonry Structures, Hamid R. Lotfi and P. Benson Shing, ST Jan. 94, p63-80.

Load Transfer Determination for Airfield Pavements Using the Falling Weight Deflectometer, Michael I. Hammons and David W. Pittman, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p523-530.

Mechanical Behavior of Metal Contact Joint, Shigeru Kuranishi, Futamia Naganuma, Masatoshi Nakazawa and Tetsuo Iwakuma, ST July 94, p1977-1990.

Plastic Collapse at Lap Joints in Pressurized Cylinders under Axial Load, Jin-Guang Teng, ST Jan. 94, p23-45.

Possibilities and Problems of Latticed Structures, Mamoru Kawaguchi, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p350-376.

Recent Studies of the Behaviour of Semi-Rigid Composite Connections, David A. Nethercot and Riccardo Zandonini, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1143-1148.

Research and Application of Various Joints of Space Grid Structures in China, Xi-Liang Liu, (Spatial, Lattice and Tension Structures, John F. Abel. ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p221-228. Simplified Dynamic Analysis for Gravity Dams, A. Ghobarah, Ahmad El-Nady and Tarek Aziz, ST Sept. 94, p2697-2716.

Ultimate Resistance of Unstiffened Multiplanar Tubular TT- and KK-Joints, Joop C. Paul, Yuji Makino and Yoshiaki Kurobane, ST Oct. 94, p2853-2870.

Joints, bolted

Behavior of Bolted Joints in 3-D Braided Composites, Rona L. Reid and Aly El-Shiekh, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p287-295.

Buckling Behavior of Square-and-Diagonal Double-Layer Grid, Toshitsugu Saka and Yoshiya Taniguchi, ST Apr. 94, p1088-1102.

Joints, bonded

Surface Preparation of Steel for Adhesive Bonding in Rehabilitation Applications, Steven H. McKnight, Pierre E. Bourban, John W. Gillespie, Jr. and Vistasp M. Karbhari, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1148-1155.

Usage of Adhesives and Composites in Highway Structures, Hani G. Melhem and John R. Schlup, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p983-990.

loists

Reliability of Light-Gage Metal Joist Hangers, Francis O. Berkoh and Juan J. Salinas, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p906-911.

Jordison, Donald D.

Charles A. Parthum Is 1994 Nominee for ASCE President-Elect, NE July 94, p3.

Jurisdiction

Decision Aids for Enhancing Intergovernmental Interactions: The Prenotification Analysis Support System (PASS), Marcus Lester, Edward Liebow and Judith Holm, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p168-175.

Emergency Response Preparedness Analysis for Radioactive Materials Transportation, Emelinda M. Parentela, Shashi K. Sathisan, Sandeep S. Burti and Walter C. Vodrazka, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1249-1254.

Kalman filter

Adaptive Forecasting of Hourly Municipal Water Consumption, Chatree Homwongs, Tep Sastri and Joseph W. Foster, III, WR Nov/Dec. 94, p888-905.

Element Identification of Member Properties of Framed Structures, Andres W. C. Oreta and Tada-aki Tanabe, ST July 94, p1961-1976.

Extraction of Dynamic Soil Properties Using Extended Kalman Filter, Jeen-Shang Lin, GT Dec. 94, p2100-2117

Identification and Uncertainty Estimation of Structural Parameters, C. G. Koh and L. M. See, EM June 94, p1219-1236.

Navigation of Autonomous Mobile Robots, Georges Blaha and Stephen R. Gerig, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p70-78.

Streamflow Forecasting for Han River Basin, Korea, Haitham M. Awwad, Juan B. Valdés and Pedro J. Restrepo, WR Sept./Oct. 94, p651-673.

Kansas

Elevated Walkways Rise Above Impact on Environment, CE Aug. 94, p78.

Unforeseen Conditions Don't Break Fix Costs, CE Mar. 94, p27.

Water Transfer Law in Kansas, John C. Peck, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p279-282.

Wichita Aquifer Gets Big Charge From Little Arkansas, CE Sept. 94, p13.

Kaolin Effect of Heat Treatment on Strength of Clays, R. C. Joshi, Gopal Achari, D. Horsfield and T. S. Nagaraj, GT June

94, p1080-1088. Flocculation Kinetics Using Fe(III) Coagulant to Coagulate Kaolin Clay in Water: Effects of Temperature, Lim-Seok Kang and John L. Cleasby, Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p162-169.

Impact of System Chemistry on Electroosmosis in Contam-inated Soil, Gerald R. Eykholk and David E. Daniel, GT

May 94, p797-815.

Mechanical Properties of Kaolinite/Fiber Soil Composite, M. H. Maher and Y. C. Ho, GT Aug. 94, p1381-1393.

A Piezoelectric Sediment Density Probe, I. R. McDermott, A. D. King and S. J. Smyth, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p239-248.
Shear Modulus of Kaolin Containing Methane Bubbles, S. M. Duffy, S. J. Wheeler and J. D. Bennell, GT May 94,

Kentucky

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Kinematic wave theory

A Chance Constrained Model Using Kinematic Wave Routing for Stormwater Infrastructure Rehabilitation, Timothy L. Jacobs and Miguel A. Medina, Jr., (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p39-54.

Critical Rainfall Duration for Maximum Discharge from Overland Plane, Charng-Ning Chen and Tommy S. W. Wong, HY Sept. 93, p1040-1045.

Free-Surface Instability in Flow down Steep Rivers, Cheng-lung Chen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1264.

Hydraulic Properties of Surface Runoff on Ash-Mixed Concrete Pavement, Reza M. Khanbilvardi and Shahriar Afshari, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p205-209.

Estimating Laboratory Wave Reflection Using Laser Doppler, Steven A. Hughes, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p918-933.

Hybrid Noninertia and Statistical Model Versus Hydrody namic Routing, Hussam E. S. Fahmy and Hubert J. Morel-Seytoux, HY June 94, p706-721.

The Kinematic Design of a Robotic Large Space Structure Construction Service, Mark R. Routson, Jackson C. S. Yang and Thomas C. Taylor, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p229-238.

Kinematics of Excavators (Backhoes) for Transferring Surface Material, A. J. Koivo, AS Jan. 94, p17-32.

Kinematics of Wave Overtopping on Marine Structure, J. J. Lee, F. Zhuang and C. Chang, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p821-834.

Large Deformation Theory Using Truncated Rotations, Daniel A. Miller and Anthony N. Palazotto, (Engineering, Construction, and Operations in Space IV, Rodney Galloway, ed. and Stanley Lokaj, ed., 1994), p137-146

New Kinematic Hardening Model, Wei Jiang, EM Oct. 94,

Nonlinear Decomposition of a 2-D Wave Field, Jun Zhang, R. E. Randall, L. Chen, C. A. Spell, J. K. Longridge and M. Ye, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p150-164.

Optical Remote Sensing of Wave Surface Kinematics, Stephen Riedl, Richard Seymour and Jun Zhang, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p943-950.

Second Order Directional Wave Kinematics in Shallow Water, Jagat N. Sharma and R. G. Dean, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p165-179.

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A Coupled Mass Transfer and Surface Complexation Model for Uranium (VI) Removal from Wastewaters, John Lenhart, Linda A. Figueroa and Bruce D. Honey-man, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p249-256.

Effect of Acid Orange 7 on Nitrification Process, Yongjie He and Paul L. Bishop, EE Jan./Feb. 94, p108-121.

Flocculation Kinetics Using Fe(III) Coagulant to Coagulate Kaolin Clay in Water: Effects of Temperature, Lim-Seok Kang and John L. Cleasby, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p162-169.

Kinetics of Monochloramine Reactions with Nitrate, Oliver J. Hao, Chung M. Chien and Richard L. Valentine, EE

July/Aug. 94, p859-874.

Kinetics of Ozone Disinfection in Completely Mixed Sys-tem, Hongde Zhou and Daniel W. Smith, EE July/Aug. 94, p841-858.

Kinetics of Toluene Degradation by Denitrifying Aquifer Microorganisms, Pedro J. J. Alvarez, Paul J. Anid and Timothy M. Vogel, EE Sept./Oct. 94, p1327-1336.

Modeling Kinetics of Sediment Removal in Water Columns, P. L. Shrestha, R. S. Govindaraju and G. T. Orlob, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1065-1069.

Precipitation Kinetics of Radioactive Elements and Their Effect Upon Redox Conditions of the Nearfield, Hiroyasu Takase and Peter Grindrod, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p491-500.

Preliminary Spent LWR Fuel Oxidation Source Term Model, R. E. Einziger, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p554-559.

Technical Activities Group Relocates to ASCE Washing ton Office; for Knorr, Move Is Just the Beginning, NE Oct. 94, p1,3.

Knowledge acquisition

A+Prototypes: Concept for Individual Support in Tools for Building Design, Angelika Drach, Sandro Heitz and Markus Langenegger, CP Oct. 94, p489-506.

Advice to Young Construction Engineers, ME Jan./Feb. 94, p11.

Building KBES for Diagnosing PC Pile with Artificial Neural Network, Yi-Cherng Yeh, Yau-Hwaug Kuo and Deh-Shiu Hsu, CP Jan. 93, p71-93. Creating and Abstracting Lessons-Learned from BCO Re-

views, Michael C. Fu and E. William East, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1146-1155.

A Framework for Collaborative Distributed Facility Engineering, Taha Khedro, Michael R. Genesereth and P M. Teicholz, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1489-1496.

Good Engineers Need Good Judgment (ltr), CE July 94, p30.

An Inductive Knowledge-Based System for Mitigation of Bridge Fabrication Errors, Srinath Nagaraja and Hani Melhem, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1083-1090.

Machine Learning of Design Rules: Methodology and Case Study, Tomasz Arciszewski, Eric Bloedorn, Ryszard S. Michalski, Mohamad Mustafa and Janusz Wnek, CP July 94, p.286-308.

The Northridge Question: Can We Do Better?, CE May 94, p6.

Simulation of Learning Development in Repetitive Con-struction, James D. Lutz, Daniel W. Halpin and James R. Wilson, CO Dec. 94, p753-773.

Knowledge-based systems

Alternative Decisions for Space-Based Scheduling in Multi-Story Projects, Walid Y. Thabet and Yvan J. Beliveau, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1164-1171.

Bridge Evaluation Using a Hybrid Information System, John L. Wilson and Stephanie J. Wagaman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p1131-1136.

Neural Network, Yi-Cherng Yeh, Yau-Hwaug Kuo and Deh-Shiu Hsu, CP Jan. 93, p71-93.

CadVisor (CAD Equipment Analysis and Selection System), Bruce C. Goettel, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2140-2144.

Checking of CAD Drawings for Fabrication Issues, Jay Ernst and W. M. Kim Roddis, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p248-253.

The Community Options Model@: A PC Tool for Evaluating Community Choices for Marinas and Tourism, Daniel R. Talhelm, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p29-38.

Computer-Aided Laboratory Teaching in Geotechnics, I. E. G. Davey-Wilson, El Oct. 94, p430-435.

Computer-Based Advisors for Environmentally Conscious "Green" Product Design, Antonio Diaz-Calderon, Steven Fenves, James Garrett and Chris Hendrickson, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1497-1504

Construction Expertise Transfer with Knowledge Based Systems, Hans Björnsson and Bjarni P. Hjaroar, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p964-971.

Development of a Knowledge-Based System for Sanitary Landfill Design, H. Basri and E. I. Stentiford, (Comput ing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1257-1264.

Development of an Expert System for Daily Drought Monitoring, T. J. Chang, H. Zheng and X. A. Kleopa, (Computing in Civil Engineering, Khalil Khozeimeh, ed.,

1994), p630-639.

Development of an Expert System to Identify Hazardous Highway Spots, Joseph E. Hummer and Paul R. Sloup, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p333-340.

The Development of an Expert System Used in Preliminary Design of Concrete Bridges, Nicolaas Stuurstraat and Cornelis van der Veen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p909-912.

Expert System for Bridge Scour and Stream Stability, Suzanne Pollon, Lea Adams, Richard Palmer and George Turkiyyah, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1389-1396.

Expert System with Learning Ability for Retrofitting Steel Bridges, Ichizou Mikami, Shigenori Tanaka and Akira Kurachi, CP Jan. 94, p88-102.

Flexible Extracation of Practical Knowledge from Bridge Databases, Yoram Reich, Steven J. Fenves and Eswaran Subrahmanian, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1014-1021.

Geometric-Based Reasoning System for Project Planning, A. A. Morad and Y. J. Beliveau, CP Jan. 94, p52-71.

Heuristic Knowledge-base Approach to Runoff Estimation in Midwestern States Using a SCS Curve Number Method, Jaewan Yoon and G. Padmanabhan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p410-

A High Level and Real Time Integration Approach for CAD Systems, Mustafa Alshawi, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1779-

A Hypermedia Constructability System, Bob McCullouch and Bob Patty, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1397-1404.

Implementation of an Object-Oriented Knowledge Representation Scheme for the Development of an Intelligent CAD Interface, Nabil Kartam, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1772-1778.

Implementation of Knowledge-Based GIS: A Case Study, Gary S. Spring, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1332-1338.

An Inductive Knowledge-Based System for Mitigation of

Bridge Fabrication Errors, Srinath Nagaraja and Hani Melhem, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1083-1090.

Integrated Research for Civil Infrastructure Systems: A Future Challenge, S. C. Liu, K. P. Chong and M. P. Singh, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p1-13.

An International Knowledge Database for Ground Improvement Geo-Systems, C. John Yoon, Theva Thevanagayam and Ilan Juran, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p277-284.

KBES for Process Control of Nitrification in Activated Sludge Process, Naci H. Ozgur and Michael K. Sten-

strom, EE Jan./Feb. 94, p87-107.

Knowledge Issues in Modeling, Hossam El-Bibany, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p579-583.

Knowledge Representation and Processing in Relational Data Base, Teresa M. Adams, CP Apr. 93, p238-255.

A Knowledge-Based Computer System for Financial Wind Risk Management, Auguste C. Boissonnade and Surya K. Gunturi, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2191-2198.

Knowledge-Based Design of Project-Procurement Process,

R. A. Mohsini, CP Jan. 93, p107-122.

Knowledge-Based Expert Systems For Geotechnical Factors in Dredging, S. Joseph Spigolon, Reda M. Bakeer and Jack Fowler, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p269-278.

Knowledge-Based System for Wind Damage to Building Kishor C. Mehta, Douglas A. Smith and Ronald H. Cheshire, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p726-735.

Machine Learning in Civil Engineering - Important Issues and Challenges, Benoît Julien, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p877-884.

MDA Planner: Interactive Planning Tool Using Product Models and Construction Methods, Adina Jägbeck, CP Oct. 94, p536-554.

Modeling of a Knowledge-Based Object-Oriented CAD System for Architectural and Structural Design, Undine Kunze, (Computing in Civil Engineering, Khozeimeh, ed., 1994), p1791-1797.

Object-Oriented Process Modeling to Support Cooperative Planning in Industrialized Building Construction Project, Yusuke Yamazaki, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p998-1005.

Precedents in Design: A Computational Model for the Organization of Case Knowledge, Rivka Oxman, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p438-445.

Quality Management of Earthwork Using Knowledgebased Systems, Shrinath J. Kotdawala and Imad A Basheer, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p426-429.

Representation of Vertical Constraints Knowledge for Scheduling Multi-Story Projects, Walid Y. Thabet and Yvan Beliveau, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p349-355.

SCHEREC: SCHedule RECovery System, Feniosky Pěna, Robert Logcher, Naoto Mine and Timothy McManus, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p17-24.

SCREENER - An Expert System tool for Environmental Impacts Evaluation and Mitigation, P. Nathan Daniel, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1355-

SELECTCRANE: An Expert System for Optimum Crane Selection, Awad S. Hanna, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p958-963.

Selection of Earth Retention Systems Using Expert System, V. Sinha, M. Arockiasamy and A. Sinha, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p418-425

Towards Practical Machine Learning Techniques, Yoram Reich, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p885-892.

Use of Expert Systems in Selecting Equilibrium Isotherms of Organic Compound Adsorption on Activated Carbon, Imad A. Basheer and Shrinath Kotdawala, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p640-643.

Using Knowledge Based Systems for Training the Young Engineer, James Crum and Michael Mulvihill, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

Validation of Knowledge-Based System with Multiple Bridge Rail Experts, Paul N. Roschke, TE Sept./Oct. 94, p787-806.

Koelzer, Victor A.

ASCE Elevates 13 of Its Own to Honorary Membership, NE May 94, p3.

Qualification System for Building Engineers in Korea, Li-Hyung Lee and Waon-Ho Yi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p215-220.

Streamflow Forecasting for Han River Basin, Korea, Haitham M. Awwad, Juan B. Valdés and Pedro J. Restrepo, WR Sept./Oct. 94, p651-673.

Lahor

Forecasting Labor Productivity Using Factor Model, H. Randolph Thomas and Ahmet S. Sakarcan, CO Mar. 94,

Labor-Political Factors for International Firms in Develop ing Regions, Enno "Ed" Koehn and Frank Atuahene, El Jan. 94, p41-49.

Laboratories

Experiences with an Undergraduate Structural Engineering Laboratory, Stephen Pessiki, Le-Wu Lu and Ben T. Yen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1369-1374.

The French Mediation Mission: Siting of Underground Research Laboratories, Christian Bataille, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p249-257.

A New Laboratory for Teaching Structural Engineering, Richard A. Behr and David S. Vollenweider, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p321-326.

Steam Plant Becomes Biotech Lab. Terry Lundeen, Todd Perbix and John Schwartz, CE Sept. 94, p44-47.

"A New Way of Teaching Structural Engineering With the 'AN/EX' Mini-Laboratory", Richard A. Behr, (Struc-tures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1571.

Laboratory tests

Acoustic-Doppler Velocimeter (ADV) for Laboratory Use, Atle Lohrmann, Ramon Cabrera and Nicholas C. Kraus, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p351-365.

Analysis of Prototype Long Period Waves for Los Ange-les/Long Beach Harbor Resonance Studies, William C. Seabergh, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p15-27.

Asphalt Portland Cement Concrete Composite: Laboratory Evaluation, I. L. Al-Qadi, H. Gouru and R. E. Weyers, TE Jan./Feb. 94, p94-108.

Assessment of Risk of Thermal Cracking in Hardening Concrete, Mats Emborg and Stig Bernander, ST Oct. 94, p2893-2912.

Bearing Capacity of Rectangular Footings on Geogrid-Reinforced Sand, Temel Yetimoglu, Jonathan T. H. Wu and Ahmet Saglamer, GT Dec. 94, p2083-2099.

The Behavior of a Building with Shallow Foundations on a Stiff Lateritic Clay, Luciano Décourt, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1505-1515.

Buoyant Advection of Gases in Unsaturated Soil, Gregory E. Seely, Ronald W. Falta and James R. Hunt, EE Sept./

Oct. 94, p1230-1247.

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Capping Contaminated Sediments - The Theoretical Basis and Laboratory Experimental Evidence for Chemical Containment, L. J. Thibodeaux, K. T. Valsaraj and D. D. Reible, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1001-1007.

Case Study of Modified Bituminous Mixtures: Somerset, Kentucky, Amy L. Simpson and Kamyar C. Mahboub, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p88-96.

Change in Gasoline Constituent Mass Transfer During Soil Venting, Nancy J. Hayden, Thomas C. Voice, Michael D. Annable and Roger B. Wallace, EE Nov./Dec. 94, p1598-1614.

Characteristics of Solitary Wave Breaking Induced by Breakwaters, Stéphan T. Grilli, Miguel A. Losada and

Francisco Martin, WW Jan./Feb. 94, p74-92.

Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Mar-cel, ed. and Nicholas C. Kraus, ed., 1994, 0-7844-0043-1, 983pp.

Comparison of Current Meters Used for Stream Gaging Janice M. Fulford, Kirk G. Thibodeaux and William R. Kaehrle, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p376-385.

Comparison of Rock Correction Methods for Compaction of Clayey Soils, Sandra L. Houston and Kenneth D. Walsh, GT Apr. 93, p763-778.

Comparison of Wave Reflection Equations with Wave-Tank Data, Dennis C. Cotter and Subrata K. Chakrabarti, WW Mar./Apr. 94, p226-232.
Computer-Aided Laboratory Teaching in Geotechnics, I.

E. G. Davey-Wilson, El Oct. 94, p430-435.

Consolidation Characteristics of an Offshore Clay Deposit, J. A. R. Ortigao and A. S. F. J. Sayao, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1415-1424.

Correction for Settlement in Submerged Parshall Flumes, S. Abt, A. Genovez and B. Florentin, IR May/June 94,

p676-682.

Cyclic Axial Loading of Drilled Shafts in Cohesive Soil, Kevin J. McManus and Fred H. Kulhawy, GT Sept. 94, p1481-1497

Design of Clay Liner Permeability at Laboratory Scale Using Expert Systems, Imad A. Basheer, Wissam A. Naouss and Lakshmi N. Reddi, (Computing in Civil En-gineering, Khalil Khozeimeh, ed., 1994), p273-276.

Design of Socketed Drilled Shafts in Limestone, M. C. McVay, F. C. Townsend and R. C. Williams, GT Oct. McVay, F. C.

92, p1626-1637.

Development of a Technique to Acoustically Detect and Study Fluid Mud and its use in Dredging Management, Shawn Hanrahan and Anthony DePasquale, (Dredging 94, E. Clark McNair, Jr., ed., 1994), p440-448. Development of a Visual Method to Track the Movement

of Hydrogen Bubbles in a Laboratory Flume, Athanasios N. Papanicolaou and Panayiotis Diplas, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p205-212.

Distribution of Shear Force on Boundary of Smooth Rec-tangular Duct, David G. Rhodes and Donald W. Knight,

HY July 94, p787-807.

Effect of Nonuniform Stresses on Measured DSS Stress-Strain Behavior, Don J. DeGroot, John T. Germaine and Charles C. Ladd, GT May 94, p892-912.

Effect of Orientation and Size of Helley-Smith Sampler on Its Efficiency, Jocelyn M. Gaudet, André G. Roy and James L. Best, HY June 94, p758-766.

Effect of Pier Geometry on Scour in Graded Gravels, Luis Ayala and Francisco Grandón, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p73-77.

Effects of Simulated Ice on the Performance of Price Type-AA Current Meter Rotors, Janice M. Fulford, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p251-258.

Effects of Temperature and pH on Residual Aluminum in Alkaline-Treated Waters, John E. Van Benschoten, James N. Jensen and Md. A. Rahman, EE May/June 94, p543-559.

Equilibrium-Range Spectrum of Waves Propagating on Currents, Kyung Duck Suh, Yoo-Yin Kim and Dong Young Lee, WW Sept./Oct. 94, p434-450. Equivalent Diameter of Vertical Drains With an Oblong

Cross Section, Richard P. Long and Alvaro Covo, GT Sept. 94, p1625-1630.

Estimating Laboratory Wave Reflection Using Laser Doppler, Steven A. Hughes, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p918-933.

Evaluation and Control of Collapsible Soils, Adnan A.

Basma and Erdil R. Tuncer, GT Oct. 92, p1491-1504. Evaluation of Depth-Limited Wave Breaking Criteria,

George M. Kaminsky and Nicholas C. Kraus, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p180-193.

Evaluation of Soil Liquefaction by Energy Principles, J. Ludwig Figueroa, Adel S. Saada, Liqun Liang and Nitin

M. Dahisaria, GT Sept. 94, p1554-1569.

Experimental Study of Monochromatic Wave-Ebb Current Interaction, Michael J. Briggs and Philip L. -F. Liu, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p474-488

Extensive Comparison of Directional Wave Analysis Methods From Gauge Array Data, Michel Benoit, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p740-

Fatigue of Prestressed Concrete Beams with Inclined Strands, John F. Muller and Peter F. Dux, ST Apr. 94,

p1122-1139.

Fine-Grained Sediment Transport in Pawtuxet River, Rhode Island, C. Kirk Ziegler and Bradley Nisbet, HY May 94, p561-576.

Velocity Profiles in Gravel-Bed Rivers, Vito Ferro and Giorgio Baiamonte, HY Jan. 94, p60-80.

Gas in Soils II: Effect of Gas on Undrained Static and Cyclic Strength of Sand, Nader S. Rad, Antonio J. D. Vianna and Toraly Berre, GT Apr. 94, p716-736.

Influence of Geotextiles on Performance of Saline Sebkha

Soils, Sahel N. Abduljauwad, Fouad Bayomy, Abdul-Karim M. Al-Shaikh and Omar S. Baghabra Al-Amoudi, GT Nov. 94, p1939-1960.

Interlaboratory Comparison of UO₂ Dissolution Rates, W. J. Gray, J. C. Tait, S. A. Steward and D. W. Shoesmith, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2597-2601.

Laboratory and Field Demonstrations of Sediment Treatment Technologies by the USEPA's Assessment and Re-mediation of Contaminated Sediments (ARCS) Program. Stephen Garbaciak, Jr., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p567-578.

Laboratory and Field Leaching Tests on Coastal Salt-Bearing Soils, Nabil F. Ismael, GT Mar. 93, p453-470.

Laboratory Experiment of Longshore Bars Produced by Breaker-Induced Vortex Action, Da Ping Zhang, Tsuguo Sunamura, Shigenobu Tanaka and Koji Yamamoto, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p29-43.

Laboratory Performance of Quartzite Based Stone Matrix Asphalt Mixtures (SMAM), Ali A. Selim, Ramzi Taha and Fouad Bayomy, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p635-

Large Scale Measurements of Near Surface Orbital Velocities in Laboratory Waves by Using a Surface Following Device, Stefan Woltering and Karl F. Daemrich, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p770-784.

Leachate Testing and Evaluation for Freshwater Sediments, James M. Brannon and Tommy E. Myers, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p737-746. Liquefaction Characteristics of Silts, Sukhmander Singh,

(Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p105-116.

Liquefaction of Silty Soils, Y. P. Vaid, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p1-16.

Measurements of the Hydrodynamic Lift and Drag Forces Acting on Riprap Side Slope, A. F. Ahmed and F. S. El-Gamal, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p331-340.

Measuring Water in Trapezoidal Canals, Zohrab Samani

and Henry Magallanez, IR Jan./Feb. 93, p181-186.

Mechanical and Bulk Properties in Support of ESF Design Issues, R. H. Price, R. J. Martin, III, P. J. Boyd and J. S. Noel, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p1987-1992.

Numerical Modelling and Laboratory Verification for the Turbulent Flow Field in the Branching Channel, Kethyl Medical Channel, Cha Feng Li, Wen-Qian Zhao, Jia Li and Lin Luo, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1295-1299.

Objectives of Proposed Large Scale Experimental Facility (ESTEX), T. M. Parchure, W. H. McAnally, Jr. and G. Nail, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p809-

On the Snow-Plough Effect when Cutting Water Saturated Sand with Inclined Straight Blades, S. A. Miedema, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p865-

Oxygen Transfer in Bubbly Turbulent Shear Flow, Kyung Soo Jun and Subhash C. Jain, HY Jan. 93, p21-36. Perimeter Load Transfer in Model Drilled Shafts Formed under Slurry, R. E. Majano, M. W. O'Neill and K. M. Hassan, GT Dec. 94, p2136-2154.

A Piezoelectric Sediment Density Probe, I. R. McDermott,

A. D. King and S. J. Smyth, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p239-248.
Quality Assurance and Quality Control in Laboratory Bioassays of Dredged Material, David W. Moore, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p728-

Removal Of Chromium From Groundwater Using Permeable Barriers: An Aquifer Simulation Study, Mark D. Schmidt and Stephen P. Shelton, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p792-804. Safety Analysis of Suspension-Bridge Cables: Williams-

burg Bridge, John Matteo, George Deodatis and David

P. Billington, ST Nov. 94, p3197-3211.

Settlement '94, Franco Ariemma, Avtar S. Vasu, Fred Agostino and Judith S. Doyle, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p192-

Settlement of Spread Footings on Granular Soil, Chandra S. Brahma, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p160-163.

Settlement Prediction of Spread Footing Based on Labora-tory Test Results, Mohammed S. A. Siddiquee, Tadatsugu Tanaka and Fumio Tatsuoka, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p137-140.

Strip Foundation on Geogrid-Reinforced Clay, E. C. Shin, B. M. Das, V. K. Puri and S. C. Yen, (Vertical and Horizontal Deformations of Foundations and Embankments, Yeung, ed. and Guy Y. Félio, ed., 1994), Albert T.

p538-547.

p336-347.
Swelling Behavior of Shales in Cold Regions, Z. W. Wang, S. L. Huang and R. C. Speck, CR Mar. 94, p21-34.
The Swept Sine Wave Testing Technique in Hydrodynamic Applications, Nicholas Haritos, Okey Nwogu and Andrew M. Cornett, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p533-546.

Test and Prediction Results for Five Spread Footings on Sand, Jean-Louis Briaud and Robert M. Gibbens, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1897-1898.

Treatment of Tetrachloroethylene with Anaerobic Attached Film Process, K. H. Chu and W. J. Jewell, EE Jan./Feb. 94, p58-71.

Understanding Discrete Fracture Growth in Rock by Interpreting Acoustic Emissions, Steven D. Glaser, (Fracture Mechanics Applied to Geotechnical Engineery, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p70-85.

Vapor Adsorption of Trichloroethylene on Quartz Sands of Varying Grain Size, David K. Kreamer, Karol J. Oja, S. M. Steinberg and Hugh Phillips, EE Mar/Apr. 94, p348-358.

Vibration Testing for Nondestructive Evaluation of Bridges. II: Results, Mahmod M. Samman and Mrinmay Biswas, ST Jan. 94, p290-306.

Washing of Bentonite in Laboratory Hydraulic-Conductivity Tests, Denis Marcotte, Jean Claude Marron and Marcel Fafard, EE May/June 94, p691-698.

Waves Propagating on an Adverse Jet, Fredric Raichlen, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p657-670.

Lagoons

Assessment and Recommendations for the Enhancement of the Bardawil Lagoon Outlets, Alfy M. Fanos, Ahmed A. Khafayg, Mohamed N. Anwar and Mary G. Naffaa, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p189-203.

A Case History of Settlement of an Embankment on Lagoonal Deposits Influenced by Artesian Conditions, An-Bin Huang and Bob Y. K. Wong, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p426-435.

Modeling Circulation and Salinity Transport in the Indian River Lagoon, M. Z. Moustafa and J. M. Hamrick, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p381-395.

Simulation of Flushing in Indian River Lagoon Using 1-D and 3-D Models, Y. P. Sheng, H. K. Lee and C. E. Demas, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p366-380

Lagrange's equations

General Formulation of Best Hydraulic Channel Section, Parviz Monadjemi, IR Jan./Feb. 94, p27-35.

Lake

Bender Park Development Milwaukee County, Wisconsin, Rob Montgomery, Barry Murray and Paul Hathaway, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p460-469.

Coupled Lake Eric Air-Sea, Storm Resolving Forecasts and Predictions, the Viento Project, John G. W. Kelley, Chieh-Cheng J. Yen, Keith W. Bedford, Jay S. Hobgood and David J. Schwab, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p202-215.

Design and Testing of Two Ice-Preserving Winter Lake Aeration Systems, Christopher R. Ellis and Heinz G. Stefan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1326-1330.

Effects of Climate Change on Water Quality, G. K. Meyer and G. T. Orlob, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p275-278.

Evaluation and Management of Non-Point Source Pollutants in the Lake Tahoe Watershed, G. Fred Lee and Anne Jones-Lee, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p516-523.

Harborside International Golf and Marina Facility, Frank L. Kudrna, Jr. and Richard P. Nugent, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p124-131. Historical, Current and Upcoming Regulation Schedules for Lake Okeechobee, Vinio Floris, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p53-56.

Interactive Models for the Regulation of Lake Ontario, Anthony J. Eberhardt, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p. 105-106.

Lake Michigan Diversion at Chicago, William H. Espey, Jr., Oscar G. Lara and Robert L. Barkau, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p175-181.

Lake Ontario Regulation Utilizing an Expert System Approach Constrained by Interest Satisfaction Relationships, Anthony J. Eberhardt, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), pl49-152.

Measurement of Turbulent Properties in a Natural System, Jörg Imberger and Roger Head, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), pl-20.

Mixing of Thermal Discharges at Low Froude Numbers, C. Liang Lee and Patrick J. Ryan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p538-542.

Modeling Ecological Impacts of Destratification, S. Geoffrey Schladow, David P. Hamilton and Murray C. Burling, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1321-1325.

Object-oriented Model of Colorado River Salinity, Nancy E. Winter and Steven C. Chapra, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p392-395.

Regional Wastewater Reuse in the Nueces Estuary, Kelly D. Payne and Samuel K. Vaugh, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p774-777.

Sedimentation and Remediation Aspects of Recreation Lakes, Satya Vasireddy, Ashok Medhi and Anand Prakash, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1136-1140.

Third Lake Watershed Assessment and Action Plan, Carey M. Brand, Gary E. Raasch and Marion E. Kessy, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p257-261.

Waterfront Renaissance Racine, Wisconsin, Thomas N. Wright, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p544-551.

A Wind Driven Lake Circulation Finite Element Model for the Upper St. Marys River, E. M. Yuen and J. A. McCorquodale, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p584-588.

Wind Lake Improvement Plan Dredging Project Wind Lake, Wisconsin, Robert W. Carr and Kathy Aron, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p141-144.

Laminar floy

Anomalous Measurements in a Compound Duct, David G. Rhodes and Donald W. Knight, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p311-320.

Newtonian Fluid Mechanics Treatment of Debris Flows and Avalanches, Bruce Hunt, HY Dec. 94, p1350-1363.

Laminated wood

Analysis of Glulam-FRP Beams by a Layer-Wise Formulation, Julio F. Davalos, Youngehan Kim and Sonnath S. Sonti, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p67-75.

Composite Beam Element with Layerwise Plane Sections, Youngchan Kim, Julio F. Davalos and Ever J. Barbero, EM May 94, p1160-1166. Development of Hardwood Glulam Timber Bridge Stan-, H. B. Manbeck, J. J. Janowiak, P. R. Blankenhorn and P. Labosky, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1304-1309.

In Rehab We Trust, Benjamin Lavon, CE Sept. 94, p73-74. Innovations in Glulam Timber Bridge Design, Michael A. Ritter, Thomas G. Williamson and Russell C. Moody, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1298-1303.

Natural Decay Resistance of Glued-Laminated Beams, Stephen L. Quarles, Kevin A. Flynn, William A. Dost and Mark G. Dietz, (Structures Congress XII, N. C.

Baker, ed. and Barry J. Loodno, ed., 1994), p707-712.
Self-Balancing Laminate, Jozsef Bodig, Robert T.
Brooks and Allan G. Burk, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p689-

Timber Structures, Daniel F. Tully, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p97-102.

Buckling Mode Change of Antisymmetric Angle-Ply Laminates, Wen-Chi Chen, EM Mar. 94, p661-669

Damage Containment and Residual Strength of Composite

Laminates, C. S. Chu, AS Apr. 94, p240-243.

Design and Field Performance of a Metal-Plate-Connected Wood Truss Bridge, Michael H. Triche, Michael A. Ritter, Stuart L. Lewis and Ronald W. Wolfe, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1310-1315.

Dynamics of Laminated Plates with Layer Waviness, Raouf A. Raouf, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p109-115.

Free Vibrations of Laminated Anisotropic Cylindrical Shells, P. R. Heyliger and A. Jilani, EM May 93, p1062-1077.

Glulam Gets New Layers, New Strength and New Uses, ET Aug./Sept. 94, p8-9.

Hygrothermal Effects in Composite Sandwich Panels, Charles E. S. Ueng and Jonathan D. Sherrill, (Engineering, Construction, and Operations in Space IV, Rodney Galloway, ed. and Stanley Lokaj, ed., 1994), p306-315.

Inelastic Response of Metal Matrix Composite Tubes, Robert S. Salzar and Furman W. Barton, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p266-275.

Late Stage Damage in G30-500/PMR-15 Laminates, Wieslaw K. Binienda, Anping Hong, Andrew Gyekenyesi and John Hemann, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p316-325.

Modal Interaction in the Response of Laminates, Jamal F. Nayfeh, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p89-98.

Nonlinear Analysis of Stiffened Laminated Cylindrical Shells Using the Layerwise Theory of Reddy, M. Savoia and J. N. Reddy, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p127-136.

Postbuckling Response of Doubly-Curved Shallow Panels Under Complex Loading Conditions, L. Librescu and M. Y. Chang, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p116-126.

Snap Buckling of a Delaminated Layer in a Composite Cylinder, Wan-Lee Yin, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p156-165.

Stress and Displacement of Thick Doubly Curved Laminated Shells, Chih-Ping Wu and Chi-Chuan Liu, EM July

94, p1403-1428.

Thermal Cycling of Thin and Thick Ply Composites, Stephen S. Tompkins, James Y. Shen and Andre J. Lavoie, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p326-335.

Time-Dependent Behavior of RC Members Strengthened With FRP Laminates, Nikolaos Plevris and Thanasis C. Triantafillou, ST Mar. 94, p1016-1042.

Strength of New Heat Treated Window Glass Lites and Laminated Glass Units, H. Scott Norville, Paul M. Bove, Darrel L. Sheridan and Stacey L. Lawrence, ST Mar. 93,

Land application

Beneficial Use Alternatives for Water Treatment Plant Residuals, Ann M. Copeland, Carel Vandermeyden and David A. Cornwell, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p137-145.

Modifying One of the Nation's Most Successful Biosolids Lime Stabilization Operations, Randy Naef, Ronald J. Matheson, Mike Guthrie and Tracy Cork, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p154-161

Nutrient Leaching from Alfalfa Irrigated with Municipal Wastewater, Scott F. Korom and Roland W. Jeppson, EE Sept./Oct. 94, p1067-1081.

Land development

Bender Park Development Milwaukee County, Wisconsin, Rob Montgomery, Barry Murray and Paul Hathaway, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p460-469.

CAD-Based "Intelligent" Drawings: An Automated Quality Control Approach to Land Development, Charles McIntyre, Kevin Parfitt and Matt Syal, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p547-554.

Harborside International Golf and Marina Facility, Frank L. Kudrna, Jr. and Richard P. Nugent, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p124-131.

Japan Builds 21st Century Monuments, Charles R. Heidengren, CE Aug. 94, p57-59.

Land Development Regulations: Roadblock to Affordable Housing, Thomas J. Olenik and S. L. Cheng, UP Mar. 94, p22-27.

Laws and Regulations Regarding Wetland Mitigation and Mitigation Banking, John D. Rogner, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p333-341.

On "Solid" Golden Pond, Ronald J. Arceneaux and Dale L. Watson, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994),

Planning and Improvement of Coastal Area Utilization, Masatsugu Fukuya, Junji Tanaka, Shigeki Nakamura, Toshiya Taneichi and Hideyuki Kida, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p222-231.

Pros and Cons of Developing Recreational Facilities on Closed Landfills, Michael S. Golden, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p257-260.

Visitor Usage Analysis as Basis for Marina Expansion, William E. McCleish and John C. Corrough, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p597-604.

The Waterfront Development Process, Jeffrey A. Bartoszek and Ronald E. Schults, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p93-103.

Wetland Mitigation Banks -- A Win-Win Situation, Robert D. Sokolove and P. Robert Thompson, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p342-351.

Dewatering and Crust Management of Confined Disposal Areas in Galveston Bay, Texas, Richard F. Thomas, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1400Modeling Settlements of an Existing Municipal Solid Waste Landfill Sideslope Using an Earthen Surcharge Pile, William L. Deutsch, Jr., Owen R. Esterly and John Vitale, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and

Guy Y. Félio, ed., 1994), pl 135-1148.

Probabilistic Observation Method for Settlement-Based Design of a Landfill Cover, Wilson H. Tank, Robert B. Gilbert, Mauricio Angulo and Richard S. Williams, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1573-1589.

Land information systems

Creation of a Modernized Land Information System for Milwaukee County, Kurt W. Bauer, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p220.

Creation of Land Information System for Milwaukee County, Wisconsin, Kurt W. Bauer, SU Nov. 94, p156-

Land management

Community Greenways are Linear Recreationways, Robert D. Espeseth, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p520-525.

Creation of Landowner Compacts for Sustainable Commu-nity Development, Brian W. Baetz, UP Dec. 94, p174-182

Lessons for Effective Urban-Containment and Resource-Land-Preservation Policy, T. Moore and A. C. Nelson, UP Dec. 94, p157-171.

Linking Linear Greenways To Communities, Brian R. Kliesmet, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p514-519.

Land reclamation

Consolidation of Ground Reclaimed by Inhomogeneous Clay, Hiroyuki Tanaka, (Vertical and Horizontal Defor mations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1262-1273. Construction of an Island, Brendan Bambrick, CO Mar. 94,

p223-227.

New Method for Stabilizing Phosphatic Clay by Using Lime Columns, NE July 94, p16.

Using Geographical Information Systems to Manage a Multipurpose Water Project, Stan B. Mattingly, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p33-36.

Land surveys

Creation of a Modernized Land Information System for Milwaukee County, Kurt W. Bauer, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p220.

A GIS Foundation Example, George Massey, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2175-2182.

Survey Distance Units: A Better Way, Larry E. Stanfel, SU Aug. 94, p130-132.

Land treatment

Nutrient Leaching from Alfalfa Irrigated with Municipal Wastewater, Scott F. Korom and Roland W. Jeppson, EE Sept./Oct. 94, p1067-1081.

Land usage

Assessing Risk of Ground-water Pollution from Land-Disposed Wastes, Kahraman Ünlü, EE Nov./Dec. 94, p1578-1597.

Community Greenways are Linear Recreationways, Robert D. Espeseth, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p520-525.

The Day User, Marcus D. Hodges, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p506-513.

Framework and Status of the ASCE Parks & Recreation Planning Guide, Marshall Flug, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred

A. Klancnik, ed., 1994), p187-195. GIS Modeling of Neo-Traditional Neighborhood Development, John R. Stone, Thomas H. Wittmann and Jonathan L. Boone, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1131-1138. Land Development Regulations: Roadblock to Affordable Housing, Thomas J. Olenik and S. L. Cheng, UP Mar. 94, p22-27.

Linking Linear Greenways To Communities, Brian R. Kliesmet, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed.,

1994), p514-519.

Milwaukee County Parks' Brown Deer Golf Course Lands P. G. A. Tour Event: A Gem of a Golf Course is Polished to a New Brilliance, Steve Bailey, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p536-543.

Minimum-Impact Modeling of Nonpoint-Source Ground-water Pollution, K. Hatfield, N. Samani and R. Noss, IR

Jan./Feb. 94, p149-167.

Planning and Improvement of Coastal Area Utilization, Masatsugu Fukuya, Junji Tanaka, Shigeki Nakamura, Toshiya Taneichi and Hideyuki Kida, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p222-231.

Prioritizing Transit Markets Using Analytic Hierarchy Process, Snehamay Khasnabis and Bharat B. Chaudhry, TE Jan./Feb. 94, p74-93.

Redesigning Suburbia for Walking and Transit: Emerging Concepts, Farhad Atash, UP Mar. 94, p48-57.

Urban Runoff Based on Land Use and Particle Size, Linda D. Pechacek, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1242-1246

Landfall

Hurricane Andrew Induced Damage to Florida Power & Light's Transmission System, C. Jerry Wong, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p387-396.

Hurricane Iniki and Typhoon Omar Meteorology, Thomas A. Schroeder, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p84-91.

Performance of Manufactured Housing in Louisiana During Hurricane Andrew, Marc L. Levitan, Leighton S. Cochran and Janet E. Levitan, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p166-175.

Standardizing Wind Measurements for Documentation of Surface Wind Fields in Hurricane Andrew, Mark D. Powell, Samuel H. Houston and Timothy A. Reinhold, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p52-69.

Analysis of Structural Debris Generation and Disposal After Hurricane Andrew: Technical Perspective, Berrin Tansel, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p533-538.

Are Geosynthetics Incorrectly Specified? (ltr), CE Aug. 94,

p27,30.

Benzene Transport Through Landfill Liners Containing Organophilic Bentonite, James A. Smith and Peter R. Jaffé, EE Nov./Dec. 94, p1559-1577.

Case Studies: Clay Cover Cracking Analysis Using FEM Techniques, Robert Y. Liang, John C. Lommler, Suckhong Lee and Bob Meyers, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p86-101.

Design of Landfill Leachate-Collection Filters, George R. Koerner, Robert M. Koerner and Joseph P. Martin, GT

Oct. 94, p1792-1803.

Design/Construction of a CFD Over Dredged Sludge, Jeffrey D. Horsfall and Katherine E. Martin, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1250-1259.

Disaster Debris Management and Diversion from Hurricane Iniki, Wayne Rifer, Brenda Osterhaug and Dale Burton, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p548-557.

Dynamic Compaction of Landfill Beneath Embankment, Paul J. Lewis and James A. Langer, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994),

Dynamic Compaction: Two Case Histories Utilizing Innovative Techniques, Albert A. Bayuk and Andrew D. Walker, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p55-67.

Effect of Gravel on Hydraulic Conductivity of Compacted Soil Liners, Thomas L. Shelley and David E. Daniel, GT Jan. 93, p54-68.

Estimating Clay Liner and Cover Permeability Using Computational Neural Networks, Girish Agrawal, Saroj Weeraratne and Kris Khilnani, (Computing in Civil En-gineering, Khalil Khozeimeh, ed., 1994), p115-122.

Fresh Kills to Get Fresher Leachate, CE June 94, p20.
Geosynthetic Loads in Landfills Slopes: Displacement Compatibility, J. H. Long, R. B. Gilbert and J. J. Daly,

GT Nov. 94, p2009-2025.

Geosynthetics Conquer the Landfill Law, Luther Derian, Edward Kavazanjian, Jr., Michael S. Snow and Kelly M.

Gharios, CE Dec. 93, p50-53. Harborside International Golf and Marina Facility, Frank L. Kudrna, Jr. and Richard P. Nugent, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p124-131.

Household Hazardous Wastes-Discard Patterns and Management Options, Chris Zeiss, UP June 94, p87-103.

Intelligent Design and Remediation of Shallow Landfill Burial Systems, James C. Ascough, II, Leonard J. Lane and Thomas E. Hakonson, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p257-264.

Keller Canyon Fills a Need, Jill Shapiro and Lawrence H.

Roth, CE Oct. 93, p44-47.

Landfill Leachate Treatment by Evaporation, Deborah R. Birchler, Mark W. Milke, A. Leigh Marks and Richard G. Luthy, EE Sept./Oct. 94, p1109-1131.

Landfill Liner Interface Strengths from Torsional-Ring-Shear Tests, Timothy D. Stark and Alan R. Poeppel, GT Mar. 94, p597-615.

Optimal Land Allocation for Solid- and Hazardous-Waste Landfill Siting, S. Diane Minor and Timothy L. Jacobs, EE Sept./Oct. 94, p1095-1108

Paper Sludge Can Cap Landfills, ET Dec. 94/Jan. 95, p5. Pipes, Not Penetrations, Keep Leachate Moving, CE June

94, p19.

Pros and Cons of Developing Recreational Facilities on Closed Landfills, Michael S. Golden, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p257-260.

Recycling Center Digs Diamonds From the Rough, CE Oct. 94, p20-21.

Second Life for Spent Sand, CE Oct. 94, p8.

Settlement Analysis of Landfill Liners over Deep Mined Areas, M. Gabr, J. J. Bowders and D. T. Mooney, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p436-450.

Settlement Evaluation for Cap Closure Performance, Edward M. Zamiskie, M. Golam Kabir and Andre Haddad, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y.

Félio, ed., 1994), p462-475.

Settlement of Dynamically Compacted Deposits, Robert G. Lukas and Norman H. Seiler, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1590-1601.

Soil-Cover Success, Issa S. Oweis, George Dakes, Thomas Marturano and Richard Wierer, CE Oct. 94, p58-59. Trash Collection Goes High-Tech, CE Aug. 94, p78

U.S. Experience with Dynamic Compaction of Collapsible Soils, Kyle M. Rollins and Ji-Hyoung Kim, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994),

Under Cover, Neno Duplancic, CE Dec. 94, p70-71.

Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994, 0-7844-0027-X, 1940pp.

Landforms

Influence of Horizontal Stresses on Gilgai Landforms, Britt Maxwell, GT Aug. 94, p1437-1444.

The Structuring of a New Architectural Landscape, Karen Van Lengen, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p956.

Value Landscape Engineering, Frederick S. Liljegren, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p424-433.

Landslides

The Daytona Beach "Large Wave" Event of 3 July 1992, Robert J. Thieke, Robert G. Dean and Andrew W. Garcia, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p45-60

Ground Failures Under Seismic Conditions, Geotechnical Special Publication No. 44, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994, 0-7844-0055-5, 260pp.

Laplace transform

Laplace Valve Stroking for Complex Piping Systems, Don-ald Serpas, (Hydraulic Engineering '94, George V. ald Serpas, (Hydraulic Engineering Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p939-

Large structures

Concurrent Genetic Algorithms for Optimization of Large Structures, Hojjat Adeli and Nai-Tsang Cheng, AS July 94, p276-296.

Construction of Large Lunar Structures by Fusion Welding of Sintered Regolith, R. S. Crockett, B. D. Fabes, T. Nakamura and C. L. Senior, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1116-1127.

Construction Operations on the OUTPOST Platform in Orbit, Thomas C. Taylor, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed.

and Stanley Lokaj, ed., 1994), p423-432

Design and Implementation of a Database for Seismic Evaluation of Structures, Steven E. Rahmann and Greg ory L. Fenves, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p790-797.

Drivetrain Design, Incorporating Redundancy, for an Autonomous Walking Robot, Gerald P. Roston and Kevin Dowling, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p184-

Erectable Truss Hardware for Large Space Structures, Ray-mond E. Dick, Terry N. Faddis and Bill G. Barr, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p414-422

Fires Deemed to Have Tested Structural Performance, Paul R. De Cicco, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p990-995.

The Kinematic Design of a Robotic Large Space Structure Construction Service, Mark R. Routson, Jackson C. S. Yang and Thomas C. Taylor, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p229-238.

Stochastic Vehicle-Queue-Load Model for Large Bridges, Ove Ditlevsen and Henrik O. Madsen, EM Sept. 94,

p1829-1847.

Traffic Loads on Large Bridges Modeled as White-Noise Fields, Ove Ditlevsen, EM Apr. 94, p681-694.

Coherent Structures in Compound Open-Channel Flows by Making Use of Particle-Tracking Visualization Tech-nique, Iehisa Nezu, Hiroji Nakagawa and Ken-ichi Saeki, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p406-415.

Dust Levitation on the Moon, Frederick A. Slane, Nebojsa Duric and Jack O. Burns, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed.

and Stanley Lokaj, ed., 1994), p897-906.

An Investigation of Turbulence in Open Channel Flow via Three-component Laser Doppler Anemometry, Mahalingam Balakrishnan and Clinton L. Dancey, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p159-175.

Laser Generation and Detection of Ultrasound in Concrete, Laurence J. Jacobs, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1328-1333.

LDV System for Towing Tank Applications, R. N. Parthasarathy and F. Stern, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p386-395.

Measurement of Turbulent Properties in a Natural System, Jörg Imberger and Roger Head, (Fundamentals and Ad-vancements in Hydraulic Measurements and Experimen-

tation, Clifford A. Pugh, ed., 1994), p1-20.

Response of Velocity and Turbulence to Abrupt Changes from Smooth to Rough Beds in Open-channel Flows, Iehisa Nezu and Akihiro Tominaga, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p195-204.

Simulation of Autonomous Robotic Excavation, Regis Hoffman and Reid Simmons, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer,

ed., 1994, p115-122.
Solar Power Satellites, Sean Russell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p793-798.

Thermal Response in Antenna Under Laser Irradiation, Leslie A. Blackham and Arsalan Razani, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p196-205.

Lateral displacement effect

Lateral Stiffness of Frames and Effective Length of Framed Columns, Ruhi Aydın and Hasan Gönen, ST May 94,

Liquefaction-Induced Lateral Spreading of Mildly Sloping Ground, Gregg L. Fiegel and Bruce L. Kutter, GT Dec. 94, p2236-2243.

Lateral forces

Design of Lateral Steel in Columns, Shamim A. Sheikh and Murat Saatcioglu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p432-437.

Lateral Bracing Criteria of the Composite Braces, Kazuo Inoue, Yasuo Higashibata and Kazuhiro Inoue, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p152-157.

Lateral Buckling: A Comparison of AISC-LRFD and Eurocode 3, Reynaud L. Serrette, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p333-336.

Wind-Induced Nonlinear Lateral-Torsional Buckling of Cable-Stayed Bridges, Virote Boonyapinyo, Hitoshi Ya-mada and Toshio Miyata, ST Feb. 94, p486-506.

Lateral loads

Composite Walls as Shear Elements in Tall Structures, Howard Wright, Anwar Hossain and Stewart Gallocher, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p140-145.

Computer Analysis of Lateral Loading in Wood-Framed Structures, R. Williams, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1513-1515.

Design Implications of Advanced Analysis in LRFD, J. Y. Richard Liew and W. F. Chen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1167-1172.

Effects of Cyclic Lateral Loads on Piles in Sand, J. H. Long and Gheert Vanneste, GT Jan. 94, p225-244.

Experimental Evaluation and Finite Element Analysis of Masonry-Infilled R/C Frames, P. B. Shing, A. B. Mehra-bi, M. Schuller and J. L. Noland, (Analysis and Compu-tation, Franklin Y. Cheng, ed., 1994), p84-93.

Interface Model Applied to Fracture of Masonry Structures, Hamid R. Lotfi and P. Benson Shing, ST Jan. 94,

p63-80.

Lateral Load Analysis of Groups of Piles and Drilled Shafts, Phillip S. K. Ooi and J. Michael Duncan, GT June 94, p1034-1050.

Lateral Load Analysis of Single Piles and Drilled Shafts, J. Michael Duncan, Leonard T. Evans, Jr. and Phillip S. K. Ooi, GT June 94, p1018-1033.

Lateral Load Resisting Systems for Circular Buildings, Robert J. McNamara and Brent R. Goldstein, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p636-641.

Lateral-Load Analysis of Frame Stagings for Elevated Water Tanks, Sajjad U. Sameer and Sudhir K. Jain, ST May 94, p1375-1394.

Laterally Loaded Piles in Elastic Media, Keming Sun, GT Aug. 94, p1324-1344.

Load-Carrying Mechanism of Restrained Plates at Large Deflections, Zhiliang Fan, EM June 94, p1388-1391.

P-Ultimate for Undrained Analysis of Laterally Loaded Piles, James D. Murff and Jed M. Hamilton, GT Jan. 93,

P-y Analysis of Laterally Loaded Piles in Clay Using DMT, M. A. Gabr, T. Lunne and J. J. Powell, GT May

94, p816-837.

Stability of Masonry Piers and Arches Including Sliding, Thomas E. Boothby, EM Feb. 94, p304-319.

Structural Reliability Analysis of Masonry Shear Walls, George T. Zorapapel, Gary C. Hart and Dan M. Frango-pol, (*Structures Congress XII*, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p205-210.

Uniform Lateral Load Capacity of Infilled Frames, Roger D. Flanagan and Richard M. Bennett, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p785-790.

Lateral pressure

Compressibility for Sand Under One-Dimensional Loading Condition, Ching S. Chang, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1298-1311.

Effects of Confinement on Concrete Columns: Plasticity Approach, A. I. Karabinis and P. D. Kiousis, ST Sept.

94, p2747-2767.

Seismic Lateral Pressures in Soils with Cohesion, R. Richards, Jr. and X. Shi, GT July 94, p1230-1251.

Lateral stability

Deformations in Sand Layer During Pile Driving, Francis D. Leathers, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p257-268.

Effects of Lateral Heading Flow Steadiness on Lateral Spillage, Eduardo A. Latimer, Michael R. Petersen and Andrew A. Keller, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry

N. Tuvel, ed., 1994), p115-118.

Horizontal and Vertical Movements of Bridge Piers Subjected to Ship Impact, Naresh C. Samtani, Jaw-Nan Wang, Frank Pepe, Jr. and Michael J. Abrahams, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p245-256.

Lateral Foundation Deformations for a Marine Test Fill, Demetrious C. Koutsoftas, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1111-1123.

Lateral Response of Unreinforced Masonry Infill Frame Panels, James A. Hill, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p77-83.

Calibration Chamber Studies of Piezocone Test in Cohesive Soils, P. U. Kurup, G. Z. Voyiadjis and M. T. Tumay, GT Jan. 94, p81-107.

Deformations About Excavations in Highly Stressed Rock, Paul Nash and Garry Mostyn, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1447-1459.

Analysis and Design of Sprinkler Irrigation Laterals, Helmi M. Hathoot, Hussein M. Abo-Ghobar, Ahmed I. Al-Amoud and Fawzi S. Mohammad, IR May/June 94, p534-549.

Hydraulics of Center-Pivot Laterals, Edmar J. Scaloppi and Richard G. Allen, IR May/June 93, p554-567.

Service Lateral Reconstruction in the Isle of Man, Jeff Wells, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p257-264.

Laterites

The Behavior of a Building with Shallow Foundations on a Stiff Lateritic Clay, Luciano Décourt, (Vertical and Horicontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1505-1515.

Latin America

Getting Together for Sustainable Development, Nicholas Chryssafopoulos, WP Spring 94, p43-44.

Lattice design

- Assessment and Upgrade of an Older Transmission Line, Robert O. Kluge and Alain H. Peyrot, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p607-612.
- Effect of Bolt Slippage on Ultimate Behavior of Lattice Structures, S. Kitipornchai, F. G. A. Al-Bermani and A. H. Peyrot, ST Aug. 94, p2281-2287.
- Optimization of Space Lattice Structures with Multimodal Frequency Constraints, J. Czyz and S. Lukasiewicz, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p419-429.
- Possibilities and Problems of Latticed Structures, Mamoru Kawaguchi, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p350-376.
- Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994, 0-87262-953-8, 1115pp.
- Test Experience with Heavy Angle Dead End Lattice Transmission Towers, J. M. Ferguson, D. D. Cannon and R. E. Nickerson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p601-606.

Lattices

- Buckling of Single Layer Latticed Dome under Uniform Gravity Load, Masumi Fujimoto, Katsuhiko Imai and Toshitsugu Saka, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p509-518.
- Discrete Field Stability Analysis of X-Braced Lattices, Raja R. A. Issa and R. Richard Avent, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p450-459.
- Effect of Joint Rigidity on Buckling Strength of Single Layer Lattice Domes, Shiro Kato, Itaru Mutoh and Masaaki Shomura, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p469-478.
- Equivalent Continuum Model for Deployable Flat Lattice Structures, Charis Gantes, Jerome J. Connor and Robert D. Logcher, AS Jan. 94, p72-91.
- Experimental Study on the Buckling Behavior of a Triodetic Aluminum Space Frame: No. 2 Ultimate Bearing Strength of a Single Layer Space Frame, Kenichi Sugizake and Shigeru Kohmura, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p479-488.
- Investigating the Behavior of a Lattice Structural Section, L. Shan and M. Hanson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p725-730.
- Large Deformation Analysis of Lattice Truss Structures Including Hysteretic Material Behavior, Nayla Khattar, George E. Blandford and Shien T. Wang, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p499-508.
- Nonlinear Buckling Response of Single Layer Latticed Barrel Vaults, Seishi Yamada and Takashi Taguchi, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p519-528.

A Study on Buckling Characteristics of Single-Layer Latticed Domes with the Initial Geometrical Imperfection, Hwan-Mok Jung, Young-Hwan Kwon and Moon-Myung Kang, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p489-498.

Launching

Allowable Design Loads for Marman Clamp Systems, Robert DiTolla and Michael Ernst, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p217-226.

Alternative Launch Systems Will They Replace the Shuttle? Daphne Burleson, (Engineering, Construction, and Operations in Space IV, Rodney G, Galloway, ed. and Stanley Lokaj, ed., 1994), p472-577.

- ARIANE-5 Launch Operations Construction and Operation of a New Launch Complex for Lower Cost, Higher Reliability Missions, Juan de Dalmau, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1521-1537.
- Future Launch Systems: The Policy Challenge, Matthew A. Bille, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1452-1461.
- Synthetic Estimation of Development Cost of Satellite, Yilin Zhu, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1512-1520.

Laws

EEO, ADA and Hiring, Mark Disney, ME May/June 94, p18-21.

- New Cop on the Block, WP Special issue 94, p2.
- Preface and Executive Summary, Howard Holme, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p1-14.
- Space Commercialization: Problems of Law and Policy, Glenn H. Reynolds, Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1462-1470.
 Space Policy: Key Points of International Law, Construction
- Space Policy: Key Points of International Law, Victor Timmons and Teresa Laguatan, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p815-819.

Layered soils

- Displacement of Batter Piles in Layered Soil, A. S. Yalcin and G. G. Meyerhof, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p975-985.
- Liquefaction Mechanism for Layered Soils, Gregg L. Fiegel and Bruce L. Kutter, GT Apr. 94, p737-755.

Layered systems

- Nonlinear Analysis of Two-Layered Wood Members with Interlayer Slip, Dan L. Wheat and Jose M. Calixto, ST June 94, p1909-1929.
- Plane Orthotropic Layer by Transfer Matrix-Spline Boundary Element, L. Z. Jiang and J. S. Lee, EM May 94, p1026-1041.

Layout

- The Day User, Marcus D. Hodges, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p506-513.
- Time-Space Tradeoff Strategies for Space-Schedule Construction, Pierrette P. Zouein and Iris D. Tommelein, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1180-1187.

Leachate collection systems

Design of Landfill Leachate-Collection Filters, George R. Koerner, Robert M. Koerner and Joseph P. Martin, GT Oct. 94, p1792-1803.

Leachates

The Effect of Fuel Type in Unsaturated Spent Fuel Tests, P. A. Finn, M. Gong, J. K. Bates, J. W. Emery and J. C. Hoh, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1080-1087.

Landfill Leachate Treatment by Evaporation, Deborah R. Birchler, Mark W. Milke, A. Leigh Marks and Richard G. Luthy, EE Sept./Oct. 94, p1109-1131.

Leachate Testing and Evaluation for Freshwater Sediments,

Leacnate Testing and Evaluation for Freshwater Sediments, James M. Brannon and Tommy E. Myers, (*Dredging* '94, E. Clark McNair, Jr., ed., 1994), p737-746.

A Predictive Hydrologic Model for Contaminant Leaching and Liner Effectiveness at Dredged Material Confined Disposal Facilities, Nadim M. Aziz, Paul R. Schroeder and Tommy E. Myers, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1507-1516.

Bioleaching of Metals from Sewage Sludge: Elemental Sulfur Recovery, B. R. Ravishankar, J. F. Blais, H. Ben-moussa and R. D. Tyagi, EE Mar./Apr. 94, p462-470.

Comparison of Uranium Dissolution Rates From Spent Fuel and Uranium Dioxide, S. A. Steward and W. J. Gray, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2602-2608.

Detailed Characterization and Preliminary Adsorption

Model for Materials for an Intermediate-Scale Reactive-Transport Experiment, David B. Ward, Charles R. Bryan and Malcolm D. Siegel, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2048-2062.

Herbicide Leaching in a Coastal Plain Soil, W. F. Ritter, R. W. Scarborough and A. E. M. Chirnside, IR May/June

94, p634-649.

In Situ Photothermal Deflection Spectroscopy of Uranium Dioxide Dissolution, James D. Rudnicki, Richard E. Russo and David W. Shoesmith, (High Level Radioactive Waste Management, High Level Radioactive Waste

tive waste Management, High Level Radioactive Waste Program Committee, 1994, p.2609-2615.

Interlaboratory Comparison of UO₂ Dissolution Rates, W. J. Gray, J. C. Tait, S. A. Steward and D. W. Shoesmith, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), 2020 (2012). p2597-2601.

Laboratory and Field Leaching Tests on Coastal Salt-Bearing Soils, Nabil F. Ismael, GT Mar. 93, p453-470.

Long Term Stability of Natural Glasses, Vladimír Knobloch and Lumír Nachmilner, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p1066-1068. Nutrient Leaching from Alfalfa Irrigated with Municipal

Wastewater, Scott F. Korom and Roland W. Jeppson, EE Sept./Oct. 94, p1067-1081.

Properties of High Fly Ash Content Cellular Concrete, Ronald D. Neufeld, Luis E. Vallejo, Wenyi Hu, Martin Latona, Christopher Carson and Christopher Kelly, EY Apr. 94, p35-48.

A Study of Alkalinity Leaching and Residual Strength of Alkaline Stabilized Sludge, Andrew P. Kruzic and Thomas M. Petry, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p129-136.

Water Chemistry of Lead Corrosion Control, Leland L. Harms, Jonathan A. Clement and Michael R. Schock, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p34-

Lead

Controlling Lead and Copper Corrosion and Sequestering of Iron and Manganese, Jonathan A. Clement, Michael Schock and Darren Lytle, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p1-8.

In-Situ Treatment of Hazardous Sediment, Lyman Wible, Stacy McAnulty, Robert Stanforth, Ajit Chowdhury and Mick Warner, (Dredging '94, E. Clark McNair, Jr., ed.,

1994), p468-473.

Looking for Solutions to the Lead-Paint Crisis, CE Aug.

Microwave Process Strips Structures of Lead Paint Safely and Cheaply, ET Apr./May 94, p1,3. Use of Granular Activated Carbon Columns for Lead Removal, B. E. Reed and S. Arunachalam, EE Mar./Apr. 94, p416-436.

Water Chemistry of Lead Corrosion Control, Leland L. Harms, Jonathan A. Clement and Michael R. Schock, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p34-

Leadership

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Dallas Session Explores What Makes a Civil Engineer into a Leader?, NE Feb. 94, p15.

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Trapped in an Elevator during the World Trade Center Bombing: A Personal Account, Satinder P. S. Puri, CF Nov. 94, p217-228.

Behavior of Pressure Tunnels and Guidelines for Liner Design, Gabriel Fernández, GT Oct. 94, p1768-1791.

Bio-Remediation of Simulated Fire Training Facility, Don-ald P. Butcher and Peter C. Gaskin, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p127-136.

Clay Plugs Seal Liner Leaks, ET June/July 94, p1,4.

Drawdowns for Leaky-Aquifer Flow with Storage in Fi-nite-Width Sink, Louis H. Motz, IR July/Aug. 94, p820-

Improving the Pipeline Hydrostatic Leak Test Model, Rod-ney F. Wedge, (*Hydraulics of Pipelines*, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p182-205.

Inverse Transient Analysis in Pipe Networks, James A. Liggett and Li-Chung Chen, HY Aug. 94, p934-955. Long-Term Effects of Neutron Absorber and Fuel Matrix

Corrosion on Criticality, William G. Culbreth and Paige R. Zielinski, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p634-641.

Qualification Leak Testing of the GA-4 and GA-9 Closure Seal Design, Richard H. Boonstra, (High Level Radioac-tive Waste Management, High Level Radioactive Waste Program Committee, 1994), p923-930.

Remote Infrared System for Scanning Hazardous Waste Tanks, Kim L. H. Morris, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p1104-1109

A Tank Moisture Model (TAMMO) for Describing Neutroan Scan Data, Edward R. Siciliano, Hans Toffer and W. Todd Watson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1102-1103.

Transport Process of Surface Liquid Spills, Hsien-Ter Chou, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p145-149.

Learning curve

Empirical Performance Comparison for Symbolic and Subsymbolic Learning Systems, Tomasz Arciszewski, Adam Borkowski, Tomasz Dybala, Janusz Racz and Piotr Wojan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1075-1082.

Learning Curve Predictors for Construction Field Operations, John G. Everett and Sherif Farghal, CO Sept. 94,

Machine learning Applications for Automated Constructa-bility Reviews, Kamolwan Lueprasert and Miroslaw J. Skibniewski, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p893-900.

A Machine Learning Decision Support System for Collab-orative Design, Nenad Ivezic and James H. Garrett, Jr., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p901-908.

Simulating Learning Development for Construction, James D. Lutz, (Computing in Civil Engineering, Khalil D. Lutz, (Computing in Cold Engineering, Khaiii Khozeimeh, ed., 1994), p1655-1662. Simulation of Learning Development in Repetitive Con-struction, James D. Lutz, Daniel W. Halpin and James R. Wilson, CO Dec. 94, p753-773.

Leasing

Monitoring Performance Indicators on Leased Hydraulic Cutterhead Dredges, William R. Chapman, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1315-1324.

New Problems in Ground & Water Lease Administration, Allan D. Kotin and Faith F. Backus, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p154-161.

Least squares method

Anatomy of Best Estimate, Leo R. Beard, HY June 94, p679-692.

Fitting Beta Distributions Based on Sample Data, Simaan M. AbouRizk, Daniel W. Halpin and James R. Wilson, CO June 94, p288-305. Navigation of Autonomous Mobile Robots, Georges Blaha

and Stephen R. Gerig, (Robotics for Challenging Envi-ronments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p70-78.

Parameter Estimation in Water-Distribution Systems by Least Squares, R. S. N. Datta and K. Sridharan, WR

July/Aug. 94, p405-422.

Parameter Estimation of Structures from Static Response. II: Numerical Simulation Studies, M. R. Banan, M. R. Banan and K. D. Hjelmstad, ST Nov. 94, p3259-3283. Parameter Estimation of Structures from Static Response. I:

Computational Aspects, M. R. Banan, M. R. Banan and K. D. Hjelmstad, ST Nov. 94, p3243-3258. Results of Parshall Flume Test, Fred W. Blaisdell, IR

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Standard of Care in Civil Litigation, Robert W. Day, EI Apr. 94, p145-148.

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pository Licensing Process, Homi Minwalla, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1578-1584.

Congressional Meltdown, CE Dec. 94, p114.

Doing Business in...Bolivia, Capitalizing on foreign interest, WP Spring 94, p23-25.

The Effect the Central Utah Project Will Have On Water Conservation in Utah, Douglas Gilmore, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p25-28. Environmental Justice: Implications for Siting of Federal

Radioactive Waste Management Facilities, J. Bennett Easterling and James S. Poles, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p63-67.

An Evaluation of Rail Access Routes to Yucca Mountain, Shashi K. Sathisan and Emelinda M. Prarentela, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1270-1277

Federal Risk Management Policy: Where Are the Problems? Anthony J. Thompson, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994),

p1-18.

A Gap in the Surface Water Treatment Rule: The Watersheds, Daniel A. Okun, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p501-507.

House Passes National Highway Bill, NE July 94, p2. Keller Canyon Fills a Need, Jill Shapiro and Lawrence H.

Roth, CE Oct. 93, p44-47. Kumar, Prasanna N. Jeffrey R. Williams, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1365-1371.

OECD spotlight on bribery, WP Spring 94, p2 OSHA Panel Studies Broader Engineer Liability, CE Nov.

Passenger-Free and Proud of It, CE Oct. 94, p8 Policy Issues Related to Replacement of Fish Screens at Glenn-Colusa Intake, Michael R. Stansbury, (Water Policy and Management: Solving the Problems, Darrell G.

Fontane, ed. and Harry N. Tuvel, ed., 1994), p153-156. Tomane, co. and marry N. Luvel, ed., 1994), p153-156. The Role of SEAOH in the Post-Iniki Rebuilding and Re-covery Effort, Howard K. C. Lau and Michael K. H. Yee, (Hurricanes of 1992: Lessons Learned and Impli-cations for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p278-283.

Role of U.S. Nuclear Regulatory Commission's On-Site Representatives in Pre-Licensing Activities for a High-Level Radioactive Waste Repository, Philip S. Justus and John Gilray, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1712-1715.

Shelters for Hurricane Refuge, Herbert S. Saffir, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed.,

1994), p241-248.

The Small Reclamation Projects Loan Program A Development Tool For The 90's, Loretta C. Lohman, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p119-122.

Transition from the Functional Requirements to the Technical Requirements Baseline, T. A. Mozhi, S. Douara, M. Senderling and T. Truong, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1641-1647

Water Transfer Law in Kansas, John C. Peck, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p279-282

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Lemley, Jack K.

Honors Will Abound in Atlanta, NE Aug. 94, p4.

Timber Pile Length Determination Using a Nondestructive Technique, Robert T. Brooks and Allan G. Burk, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p952-957.

1993 Mississippi Record Stages and Levee Failures, Sally McConkey, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p603Analysis of Levee Design in a Mountain River Using Two-Dimensional Flow Modeling, Diane M. L. Mas, Andrew J. Miller, James A. Smith and Wei-hao Chung, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p757-761.

Contraction Scour at a Bridge over the Iowa River, Edward E. Fischer, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p31-35.

Management of Dredged Material Placement Operations, Timothy D. Stark, Iván Contreras and Jack Fowler, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1353-1365.

The Miller City Levee Break and Incipient Meander Cutoff, K. A. Oberg and R. B. Jacobson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p623-627.

The Summer of 1993 Floods Lower Missouri River, William H. Espey, Jr., Leo R. Beard and John E. Reinfurt, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p628-633.

Use of HEC-2 and HEC-6 to Determine Levee Heights and Revetment Toe Scour Depths, David T. Williams and David Cozakos, (*Hydraulic Engineering* '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1075-1079

West Columbus, OH LPP Gate Closure Analysis - A Study of the Requirements for Multiple Closures, Kenneth C. Halstead and Surya Bhamidipaty, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p472-476.

When the Levee Breaks, James Denning, CE Jan. 94, p38-

A Workable Compromise on Flood Control, CE Sept. 94, p6.

Liability

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Defining Third-Party Liability, CE Jan. 94, p36.

Economic Liability Exceeds Contractual Boundaries, CE Арг. 94, р27.

Engineering Jargon and Civil Liability, Robert W. Day, EI Oct. 94, p413-418. Geotech Surprises Should Be Expected, CE Dec. 94, p24.

Indefinite Plans Beg at Indefinite Bids, CE Mar. 94, p27.

Integrated Design-Process Model, Victor E. Sanvido and Kevin J. Norton, ME Sept./Oct. 94, p55-62

Policy Issues of Transporting Spent Nuclear Fuel by Rail, H. Barry Spraggins, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1944), p163-167.

Safety at the Site, Virginia Fairweather, CE Aug. 94, p50-

Strategies for Avoiding Civil Liability, Robert W. Day, El July 94, p265-269.

Liability insurance

Annual Liability Survey Shows Premiums Rising, CE Jan. 94, p25.

Liability Insurance for Design Professionals: Can't Live With It, Can't Live Without It? Robert A. Rubin, ME Mar./Apr. 94, p18-23.

Strategies for Avoiding Civil Liability, Robert W. Day, EI July 94, p265-269.

Licenses

Still More Concerns, Worries, and Wringing of Hands, Charles S. Hodge, CC Mar. 94, p10-11.

Technical Understanding in Successful Environmental Negotiations, Nina Burkardt, Berton L. Lamb and Terry J. Waddle, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p694-697.

Compliance with NRC Subsystem Requirements in the Repository Licensing Process, Homi Minwalla, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1578-1584.

Computing in Analysis and Design in Structural Engineering Education, Practice and Registration: A View from the National Council of Examiners for Engineering and Surveying, J. Earl Herndon, Jr., (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p377-385.

Continuing Education Does Not Necessarily Educate (ltr), CE Nov. 94, p31-32.

Don't Mandate Continuing Professional Development (ltr), CE Mar. 94, p36.

The First Multipurpose Spent Fuel Container Reviewed by the U.S. Nuclear Regulatory Commission (USNRC), Ivan F. Stuart, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p467-476.

Limitations on Scientific Prediction and How They Could Affect Repository Licensing, Richard A. Van Konynenburg, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p285-291.

Nuclear Regulatory Commission Staff Approaches to Improving the Integration of Regulatory Guidance Documents and Prelicensing Reviews, Robert L. Johnson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1604-1608.

Proof-toos.

The Nuclear Regulatory Commission's Trojan Nuclear Power Plant Seismic Design Licensing Case as an Analog to Alternative Repository Licensing Strategies, Maurice Axelrad and Michael A. Bauser, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1573-1577.

Repository Program Licensing Approach, Thomas M. Williamson and April VanCamp Gil, (High Level Radioactive Waste Management, High Level Radioactive Waste

Program Committee, 1994), p1585-1592.

Role of U.S. Nuclear Regulatory Commission's On-Site Representatives in Pre-Licensing Activities for a High-Level Radioactive Waste Repository, Philip S. Justus and John Gilray, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1712-1715.

State Requires More Than Technology Degree, CE Oct.

94, p27.

The Use of Expert Judgment Elicitation to Predict Future Climate for the Yucca Mountain Nevada Vicinity, Aaron DeWispelare, Michael P. Miklas, Jr., A. Berge Gureghian, L. Tandy Herren, Robert T. Clemen and James R. Park, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1614-1621.

Utility Industry Perspectives on Repository Licensing, Christopher J. Henkel, Jay E. Silberg and Mindy A. Buren, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1567-1572.

Liens

Subcontractors Must Learn About Liens, CE Aug. 94, p24.

Considerations for Design Criteria for Lunar Structures, Eric P. Steinberg and William Bulleit, AS Apr. 94,

Corrosion Fatigue of Stiffened Offshore Steel Tubular Joints, D. S. Ramachandra Murthy, A. G. Madhava Rao and A. R. Santhakumar, ST July 94, p1991-2010.

Dimensions and Management of Facility Performance, James C. Porter, El Jan. 94, p1-7.

The Integrated Systems Approach to Facilities Management, Robert A. Snodgrass, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2199-2207.

Life support

Is It Possible to Colonize Mars? Jonathan Hurley and Steve Garcia, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p782-786.

Lunar Mining, Carrie Barkhurst, (Engineering, Construc-tion, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p811-814.

Life support systems

Adaptive Space Station Technologies and Systems for a Lunar Surface Return Mission, Larry Toups and Sam Ximenes, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p483-493.

Biosphere II - Its Effects on Space Colonization, Chris Cassidy, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p826-832.

Effects of Hurricanes Andrew and Iniki on Lifelines, Masoud M. Zadeh, Tom Larsen, Charles Scawthorn, Craig Van Anne and Tom K. Chan, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p223-232.

Living in Space, Michael Wifall, (Engineering, Construc-tion, and Operations in Space IV, Rodney G. Galloway,

ed. and Stanley Lokaj, ed., 1994), p842-845.

An Overview of the Federal Response to Hurricane Iniki, Frank R. Finch, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p294-299.

Oxygen Generation from Synthetic Moon Soil Using a Plasma Reactor, P. R. Taylor, S. A. Pirzada, K. A. Pris-brey, H. Gold and R. E. Hicks, (Engineering, Construc-tion, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), pl 178-1187.

A Space Station of Mars, Kimberly Butler, (Engineering Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p787-792. A Space Suit for Productive and Safe Extravehicular Ac-

tivity (EVA), Brand Norman Griffin, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1372-1381.

Thermal Regeneration of Spent Lithium Hydroxide, Venkatesh Srinivasan and Bernadette Luna, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1036-

Lifeline systems

ASCE Investigators Take a Look at Los Angeles' Lifelines in Earthquake's Aftermath, NE Apr. 94, p2-3.

Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani,

ed., 1994, 0-7844-0046-6, 808pp.

Lessons Learned from the Hurricanes of 1992, Ronald A. Cook, Mehrdad Soltani and Timothy A. Reinhold, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p799-802.

Lifeline Engineering Integrates Infrastructure, CE Jan. 94,

Overview of Hurricane Andrew in South Florida, Ronald A. Cook, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p70-83.

Overview of Hurricane Iniki, Arthur N. L. Chiu, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed.,

1994), p92-101.

Lift

Forces on Vibrating Cylinder Near Wall in Current and Waves, B. M. Sumer, J. Fredsøe, B. L. Jensen and N. Christiansen, WW May/June 94, p233-250.

New Airfoil-Design Concept with Improved Aerodynamic Characteristics. Demeter G. Fertis, AS July 94, p328-339

Lift slab construction

Computer Model Pointing to Dynamic Instability of Lift Slab Structure, Rusk Masih, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1832–1838.

Investigation of L'Ambiance Plaza Building Collapse, Daniel A. Cuoco, David B. Peraza and Thomas Z. Scarangello, CF Nov. 92, p211–231.

Rigging Records Are Many (Itr), CE July 94, p27–28.

Stability of Lift Slab Structure During Construction Stage, Rusk Masih, (Structures Congress XII, N. C. Baker, ed.

and Barry J. Loodno, ed., 1994), p271-277.

Lifting

Automation Raises Lift Planning Out of Manuals, ET June/July 94, p9.

Bechtel Automated Lift Planning System, Craig Bennett and Steve Ditlinger, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p401-409.

Graphic Visualization for Planning Heavy Lifts, Parmanand V. Dharwadkar, Koshy Varghese, James T. O'Connor and Thomas M. Gatton, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p759-766.

Restoring Freedom at the Capitol Dome, James R. Cagley,

CE June 94, p57-59.

Rigging Records Are Many (ltr), CE July 94, p27-28.

Hydration of Aluminate Cements, Pierre Barrett and Danielle Bertrandie, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p132-174.

Permeability Behavior of a Water Treatment Sludge, M. C. Wang and W. Tseng, GT Oct. 93, p1672-1677.

A Study of Alkalinity Leaching and Residual Strength of Alkaline Stabilized Sludge, Andrew P. Kruzic and Thomas M. Petry, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p129-136.

Lime soil stabilization

Modifying One of the Nation's Most Successful Biosolids
Lime Stabilization Operations, Randy Naef, Ronald J.
Matheson, Mike Guthrie and Tracy Cork, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p154-161.

Limestone

Evaluation of Laboratory Limerock Bearing Ratio Test on Pavement Soils in Florida, W. Virgil Ping and Zhiliang Yu, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p223-230.

Field Evaluation of Plate Bearing Load Test on Pavement Soils in Florida, W. Virgil Ping and Ling Ge, (Infrastructure: New Materials and Methods of Repair, Kim D.

Basham, ed., 1994), p231-238.

The Structural History of the Jacob Bachmann Tavern, Jack R. Kayser and Kristina Lammi, Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1570.

Limit analysis

Finite Element Limit Load Analysis by the Static Approach Using Nonlinear Programming, Hichem Smaoui, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1936-1943.

Limit Analysis and Optimal Design of Plates with Equilibrium Elements, S. Krenk, L. Damkilde and O. Høyer, EM June 94, p1237-1254.

Note on Bearing Capacity of Soft Clays under Embank-ments, H. S. Yu and S. W. Sloan, GT Jan. 94, p246-255. Regularized Method in Limit Analysis, Gong-Liang Jiang,

EM June 94, p1179-1197.

Structural Capacity of Precast Piles with Grouted Base, Osamu Kusakabe, Masaaki Kakurai, Katsutoshi Ueno and Yoshinao Kurachi, GT Aug. 94, p1289-1306.

Limit design

Design of Box Girder Bridges by Nonlinear Theory, Ahmad Salahuddin, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p491-496.

How to Optimize Frames Using Plastic Design Concept, Shahram Pezeshk, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p113-122.

Limit design method

Analytical Approach to Collapse Mechanisms of Circular Masonry Arch, Carlo Blasi and Paolo Foraboschi, ST Aug. 94, p2288-2309.

Geosynthetic Loads in Landfills Slopes: Displacement Compatibility, J. H. Long, R. B. Gilbert and J. J. Daly, GT Nov. 94, p2009-2025.

Innovative Design of Steel Gable Frames, Thomas Sputo, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p337-342. Reliability of Short and Slender Reinforced-Concrete Col-umns, Sonia E. Ruiz and J. Cipriano Aguilar, ST June 94, p1850-1865.

Limit equilibrium

Pseudostatic Seismic Stability of Slopes: Design Charts, Dov Leshchinsky and Ka-Ching San, GT Sept. 94, p1514-1532.

Limit states

The Canadian Approach in the Design of Wood Structures: Conversion to Limit States Design, Dominique P. Janssens, (Structures Congress XII, N. C. Baker, ed. and

Janssens, (Nructures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p514-519.
Comprehensive Reliability Analysis of Prestressed Concrete Beams, A. S. Al-Harthy and D. M. Frangopol, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p193-198.
Hyperspace Division Method for Structural Reliability, Satoshi Katsuki and Dan M. Frangopol, EM Nov. 94, p2405-2421.

p2405-2427.

Inverse Reliability Problem, Armen Der Kiureghian, Yan Zhang and Chun-Ching Li, EM May 94, p1154-1159.

Limit States Analysis of Masonry Arches, Thomas E. Boothby, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p797-802.

LRFD Provisions for Wood Bridges, Michael A. Ritter and Andrzej S. Nowak, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodon, ed., 1994), p549-554. Reliability Assessment of Prestressed Concrete Beams, Ali S. Al-Harthy and Dan M. Frangopol, ST Jan. 94, p180-

Reliability of Light-Gage Metal Joist Hangers, Francis O. Berkoh and Juan J. Salinas, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p906-911.

Seismic Fragility Analysis of Sheahan Pumping Building, Howard H. M. Hwang, Ah Lim Ch'ng and Hui-Mi Hsu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1006-1011.

Shallow Tunnels in Cohesionless Soil: Stability of Tunnel Face, Pierre Chambon and Jean-François Corté, GT July

94, p1148-1165.

Steel Compression Member Design in the 1994 Canadian Standard, D. J. Laurie Kennedy, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p221-226. Line of balance

CPM/LOB: New Methodology to Integrate CPM and Line of Balance, Saad A. Suhail and Richard H. Neale, CO Sept. 94, p667-684.

Linear analysis

Bulb-T and Glulam-FRP Beams for Timber Bridges, J. F. Davalos, H. V. S. GangaRao, S. S. Sonti, R. C. Moody and R. Hernandez, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1316-1321.

HVLS: Horizontal and Vertical Logic Scheduling for Multistory Projects, Walid Y. Thabet and Yvan J. Beliveau, CO Dec. 94, p875-892.

Propagation of Linear Gravity Waves Over Slowly Varying Depth and Currents, Francisco J. Rivero and Agustín S.-Arcilla, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p518-532.

Wave Reflection: Field Measurements, Analysis and Theoretical Developments, Mark A. Davidson, Paul A. D. Bird, Geoff N. Bullock and David A. Huntley, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p642-655.

Linear programming

Intelligent Design and Remediation of Shallow Landfill Burial Systems, James C. Ascough, II, Leonard J. Lane and Thomas E. Hakonson, (Computing in Civil Engi-

and Trottas E. Frakotisoft, Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p.257-264. Linear Programming for Analysis of Material Recovery Facilities, Jay R. Lund, George Tchobanoglous, Robert P. Anex and Renée A. Lawver, EE Sept/Oct. 94, p1082-1094.

Minimum-Impact Modeling of Nonpoint-Source Groundwater Pollution, K. Hatfield, N. Samani and R. Noss, IR

Jan./Feb. 94, p149-167.

Optimal Operation of Multiple-Reservoir System, Philip D. Crawley and Graeme C. Dandy, WR Jan./Feb. 93, p1-17.

Linear systems

Approximate Random Vibration Analysis of Classically Damped MDOF Systems, C. Papadimitriou and J. L. Beck, EM Jan. 94, p75-96.

Community Greenways are Linear Recreationways, Robert D. Espeseth, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p520-525.

Fatigue Lifetime with Load Uncertainty Represented by Convex Model, Yakov Ben-Haim, EM Mar. 94, p445-462

Finite-Element Calculations on Alliant FX/80, Brian C. Watson and Manohar P. Kamat, AS Oct. 94, p446-462. Step-Function Response of Muskingum Reach, J. C. I. Dooge, M. Perumal and Q. J. Wang, IR Mar./Apr. 93, p410-415.

Linearity

Practical Constant-Accuracy Linear Weir, K. Keshava Murthy and M. N. Shesha Prakash, IR May/June 94, p550-562.

Wave Motion Through Porous Structures, Xiping Yu and Allen T. Chwang, EM May 94, p989-1008.

Benzene Transport Through Landfill Liners Containing Organophilic Bentonite, James A. Smith and Peter R. Jaffé, EE Nov./Dec. 94, p1559-1577.

Clay Plugs Seal Liner Leaks, ET June/July 94, p1,4. Effect of Gravel on Hydraulic Conductivity of Compacted Soil Liners, Thomas L. Shelley and David E. Daniel, GT

Jan. 93, p54-68. Electrical-Resistivity Measurements for Evaluating Compacted-Soil Liners, R. J. Kalinski and W. E. Kelly, GT Feb. 94, p451-457.

Geosynthetics Conquer the Landfill Law, Luther Derian, Edward Kavazanjian, Jr., Michael S. Snow and Kelly M.

Gharios, CE Dec. 93, p50-53. Landfill Liner Interface Strengths from Torsional-Ring-Shear Tests, Timothy D. Stark and Alan R. Poeppel, GT

Mar. 94, p597-615. Minimum Thickness of Compacted Soil Liners: I. Stochastic Models, Craig H. Benson and David E. Daniel, GT Jan. 94, p129-152.

Minimum Thickness of Compacted Soil Liners: II. Analy sis and Case Histories, Craig H. Benson and David E. Daniel, GT Jan. 94, p153-172.

Pipes, Not Penetrations, Keep Leachate Moving, CE June

A Predictive Hydrologic Model for Contaminant Leaching and Liner Effectiveness at Dredged Material Confined Disposal Facilities, Nadim M. Aziz, Paul R. Schroeder and Tommy E. Myers, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1507-1516.

Study of Stress Concentrations at the Intersection of Underground Chambers for the Superconducting Super Collider Project, Fwu-Ding (Kim) Lin, Lichu Guan and Steven Baldauf, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1975-1982.

Washing of Bentonite in Laboratory Hydraulic-Conductivity Tests, Denis Marcotte, Jean Claude Marron

and Marcel Fafard, EE May/June 94, p691-698.

Cured-in-Place Pipe Doesn't Cause a Ripple, CE Feb. 94. p12,14,16.

Geosynthetic Loads in Landfills Slopes: Displacement Compatibility, J. H. Long, R. B. Gilbert and J. J. Daly, GT Nov. 94, p2009-2025.

Rae, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p396-400.

An Overview of Shotcrete Usage on the SSC, Steven H. Baldauf, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p773-778.

Liquefaction

Analysis of Site Liquefaction Using Earthquake Records, Mourad Zeghal and Ahmed-W. Elgamal, GT June 94, p996-1017.

Becker Test Results from Gravel Liquefaction Sites, Leslie F. Harder, Jr., (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed.,

1994), p201-220.

Behavior of Gravelly Soils During Seismic Conditions -An Overview, M. E. Hynes, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos

Dakoulas, ed., 1994), p117-120.
Blast Densification of a Thick, Loose Debris Flow at Mt. St. Helen's., Washington, Joseph E. Hachey, Robert L. Plum, R. John Byrne, Alan P. Kilian and David V. Jenkins, (Vertical and Horizontal Deformations of Founda-tions and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p502-512.

A Comparison of Three Soil Improvement Techniques to Densify Liquefaction Susceptible Sands, Alec D. Smith and Edward B. Kinner, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1224-1236.

Computer Applications in Liquefaction Analysis, Sivanuja S. Sundaram and K. K. Muraleetharan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p123-130.

Creep Effects on Static and Cyclic Instability of Granular Soils, Poul V. Lade, GT Feb. 94, p404-419. Cyclic Behavior of Gravelly Soil, Mark D. Evans and Shengping Zhou, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p158-176.

Cyclic Behavior of Partially Saturated Collapsible Soils Subjected to Water Permeation, Kenji Ishihara and Kenji Harada, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994),

Deformations in Granular Soils Due to Cyclic Loading, P. M. Byrne and J. McIntyre, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1864-1896.

Dynamic Compaction to Remediate Liquefiable Embank-ment Foundation Soils, Karl Dise, Michael G. Stevens and J. Lawrence Von Thun, (In-Situ Deep Soil Improve-

ment, Kyle M. Rollins, ed., 1994), p1-25.

Dynamic Properties of Gravels Sampled by Ground Freez-ing, Shigeru Goto, Shin'ya Nishio and Yoshiaki Yoshimi, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994),

p141-157.

Evaluation of Soil Liquefaction by Energy Principles, J.

Ludwig Figueroa, Adel S. Saada, Liqun Liang and Nitin
M. Dahisaria, GT Sept. 94, p1554-1569.

Foundation Deformation Due to Earthquakes, Ricardo
Dobry, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and
Guy Y. Félio, ed., 1994), p1846-1863.

Granuf Faitures Under Seismic Conditions, Geotechnical

Ground Failures Under Seismic Conditions, Geotechnical Special Publication No. 44, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994, 0-7844-0055-5, 260pp.

Harry Seed, Liquefaction & the Gravel Drain, Choule J. Sonu, Hiroshi Oishi and Katsuhiko Ito, CE Dec. 93,

p58-60.

In-Situ Measurements of Dynamic Soil Properties and Liq-uefaction Resistances of Gravelly Soils at Keenleyside Dam, Ken K. Y. Lum and Li Yan, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p221-240.

The Influence of Fines Type and Content on Cyclic Strength, Joseph Patrick Koester, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and

Panos Dakoulas, ed., 1994), p17-33.
Liquefaction and Embankment Failure Case Histories, 1988 Armenia Earthquake, M. K. Yegian, V. G. Ghahra-

man and R. N. Harutiunyan, GT Mar. 94, p581-596. Liquefaction Characteristics of Silts, Sukhmander Singh, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p105-116.

Liquefaction in Silty Soils: Design and Analysis, W. D. Liam Finn, R. H. Ledbetter and Guoxi Wu, (Ground Failures Under Seismic Conditions, Shamsher Prakash,

ed. and Panos Dakoulas, ed., 1994), p51-76. Liquefaction Mechanism for Layered Soils, Gregg L. Fiegel and Bruce L. Kutter, GT Apr. 94, p737-755.

Liquefaction of Artificially Filled Silty Sands, Susumu Yasuda, Kazue Wakamatsu and Hideo Nagase, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p91-104.

Liquefaction of Silty Soils, Y. P. Vaid, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p1-16.

Liquefaction-Induced Damage to Buildings in 1990 Luzon Earthquake, Kohji Tokimatsu, Hisaya Kojima, Shinichi Kuwayama, Akio Abe and Saburoh Midorikawa, GT Feb. 94, p290-307.

Numerical Simulations of Monotonic and Cyclic Loading of Granular Soil, Tang-Tat Ng and Ricardo Dobry, GT

Feb. 94, p388-403.

One-Dimensional Shock and Quasi-Static Liquefaction of Silt and Sand, Jane M. Bolton, Deanna S. Durnford and Wayne A. Charlie, GT Oct. 94, p1874-1889.

Piezometer Performance at Wildlife Liquefaction Site, California, T. Leslie Youd and Thomas L. Holzer, GT June

94, p975-995.

Post-Cyclic Consolidation Behavior of Loose Sands, J. C. Chern and C. C. Lin, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p740-747.

Postearthquake Deformation Analysis of Wildlife Site, W. H. Gu, N. R. Morgenstern and P. K. Robertson, GT Feb.

A Practical Perspective on Liquefaction of Gravels, Julio E. Valera, Michael L. Traubenik, John A. Egan and Jon Y. Kaneshiro, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994),

A Procedure for Predicting Seismic Deformation of Earth Structures, Hendra Jitno and Peter M. Byrne, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p711-725.

Procedures for Elastoplastic Liquefaction Modeling of Sands, A. Anandarajah, EM July 94, p1563-1587.

Seismic Liquefaction Potential Assessed by Neural Networks, Anthony T. C. Goh, GT Sept. 94, p1467-1480. Seismic Parameters from Liquefaction Evidence, James R.

Martin and G. Wayne Clough, GT Aug. 94, p1345-1361. Undrained Shear Strength of Liquefied Sands for Stability Analysis, Timothy D. Stark and Gholamreza Mesri, GT

Nov. 92, p1727-1747.

A User Friendly Microcomputer Program for Liquefaction Potential Analysis, A. H. Wu, J. S. Hsu and A. Urzua, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p843-848.

Cu., 1799), po-13-3-86.
Utilization of Liquid Carbon Dioxide for Planetary Exploration, Nobuki Kawashima, Ei-ichi Mizuno, Kazuya Takeda and Masaki Kojima, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1070-1076.

Vibration Induced Settlement From Blast Densification and Pile Driving, Charles H. Dowding, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1672-1688.

Liquids

Beam Model for Base-Uplifting Analysis of Cylindrical Tanks, P. K. Malhotra and A. S. Veletsos, ST Dec. 94, p3471-3488.

CDR - A Chemical Solution to a Mechanical Problem, Gary E. Blizzard, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p172-

Computing Response of Tanks with Two Liquids, Yu Tang, ST Dec. 94, p3668-3674.

Concrete Watertight Structures and Hazardous Liquid Containment, Robert Hengst, 1994, 0-87262-791-8,

Dynamic Response of Tank Containing Two Liquids, Yu Tang, EM Mar. 93, p531-548.

Environment-Friendly Deicing/Anti-Icing Fluid, Len Haslim and John Zuk, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p137-139.

A Tank Moisture Model (TAMMO) for Describing Neutroan Scan Data, Edward R. Siciliano, Hans Toffer and W. Todd Watson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1102-1103.

Transport Process of Surface Liquid Spills, Hsien-Ter Chou, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p145-149.

Uplifting Analysis of Base Plates in Cylindrical Tanks, P. K. Malhotra and A. S. Veletsos, ST Dec. 94, p3489-

Uplifting Response of Unanchored Liquid-Storage Tanks, P. K. Malhotra and A. S. Veletsos, ST Dec. 94, p3525-

Brits Banned in Malaysia, WP Special issue 94, p4.

Contemporaneous Development of Field Data: Transportation Construction Claim Defense, Kenneth H. Dunne and George Navarrete, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2124-2135.

Contemporary Model of Civil Engineering Failures, Richard L. Meehan, Brian Chun, Sang-wuk Ji, Stephanie King, Knut Ronold and Frank Yang, El Apr. 93, p138-

Dispute Avoidance and Resolution for Consulting Engineers, Richard K. Allen, 1993, 0-87262-903-1, 85pp.

Earning Empowerment From Stakeholders, Peter T. Johnson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p258-262.

Failure of Large Diameter High Density Polyethylene Sewer Pipe a Case in Point, Jey K. Jeyapalan and Joe A. Conner, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p356-371.

Five Steps to Resolving Construction Disputes-Without Litigation, Richard H. Steen, ME July/Aug. 94, p19-23.

Partnering: A Team Building Approach to Quality Con-struction Management, Osama Abudayyeh, ME Nov./ Dec. 94, p26-29.

Seminar Subjects Don't Target Profession's Problems (ltr), CE May 94, p38.

Standard of Care in Civil Litigation, Robert W. Day, EI Apr. 94, p145-148.

Littoral currents

Mixing by Shear Instabilities of the Longshore Current, J. C. Church, E. B. Thornton and J. Oltman-Shay, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p376-390.

Numerical Model of the Longshore Current on a Barred Beach, Jane McKee Smith, Magnus Larson and Nicholas C. Kraus, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p798-812

Wave-Induced Longshore Currents in Surf Zone, Donghoon Yoo, WW Nov./Dec. 94, p557-575.

Littoral deposits

Cartographic Characterization of the Littoral Camps of Dunes, Jesús Martínez Martínez, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p462-475.

Analysis of Sand Movement on Noto Coast by Geochemical Method, Kazumasa Mizumura, Toshiharu Nishimoto and Takahiko Yamamoto, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p923-927.

Analysis of Concrete Construction Live Loads on Newly Poured Slabs, Saeed Karshenas and Haitham Ayoub, ST May 94, p1525-1542.

Development of Bridge Live Load Models, John M. Kulicki, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p532-537.

Experimental Measurements of Dynamic Loads Imposed by Moving Crowds, A. Ebrahimpour, R. L. Sack, W. N. Patten and A. Hamam, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1385-1390.

Simple Live Load Distribution Factors for Girder Bridges, Sami W. Tabsh, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p497-502.

Survey Results for Concrete Construction Live Loads on Newly Poured Slabs, Haitham Ayoub and Saeed Karshenas, ST May 94, p1543-1562.

Teaching Structural Loading: A Case Study, R. Panneer Selvam, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1375-1378.

Three-Dimensional Analysis of Flexible Circular Culverts, Ian D. Moore and Richard W. Brachman, GT Oct. 94, p1829-1844.

Load combinations

Hot Spot Stresses of Tubular Joints Subjected to Combined Loadings, Ai-Kah Soh and Chee-Kiong Soh, ST Feb. 93,

Load distribution

Model Tests on Caissons, Sreenivas Alampalli and Venkatanarayana Peddibotla, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p325-336.

Resistance Mechanisms in RC Building Frames Subjected to Column Failure, Haluk Sucuoğlu, Ergin Çıtıpıtıoğlu and Sinan Altın, ST Mar. 94, p765-782.

Response of Stressed Timber T - and Box-Beam Bridges,

Hota GangaRao, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p701-706. Simple Live Load Distribution Factors for Girder Bridges, Sami W. Tabsh, (Structures Congress XII, N. C. Baker,

ed. and Barry J. Loodno, ed., 1994), p497-502. Time-Dependent Load-Distribution Behavior of Parallel-Member Wood Systems, P. Hong, K. J. Fridley and D. V. Rosowsky, (Structures Congress XII, N. C. Baker, ed.

and Barry J. Loodno, ed., 1994), p1088-1093. Ultimate Load Test of Slab-on-Girder Bridge, Bair Bakht and Leslie G. Jaeger, ST June 92, p1608-1624.

Load duration

Creep Behavior of Structural Timber under Varying Humidity Conditions, Annika Martensson, ST Sept. 94, p2565-2582.

Load factors

Calibration of Current Factors in LRFD for Steel, David V. Rosowsky, Ahmed F. Hassan and N. V. V. Phani Kumar, ST Sept. 94, p2737-2746.

Critique of Commercial Structures, Herbert S. Saffir, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p472-475.

Horizontally Curved Steel Bridge Research-Update 2, S. R. Duwadi, J. M. Yadlosky and C. H. Yoo, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1071-1076.

Notional-Load Plastic-Hinge Method for Frame Design, J. Y. Richard Liew, D. W. White and W. F. Chen, ST May

94, p1434-1454.

Stochastic Vehicle-Queue-Load Model for Large Bridges, Ove Ditlevsen and Henrik O. Madsen, EM Sept. 94, p1829-1847.

Variation of Ductility Capacity of Steel Beam-Columns, Masayoshi Nakashima, ST July 94, p1941-1960.

Worldwide Calibration of API RP2A-LRFD, R. C. Turner, C. P. Ellinas and G. A. N. Thomas, WW Sept./Oct. 94, p423-433.

Load resistance

Experimental Behavior of Polymeric Geogrids in Pullout, Ragui F. Wilson-Fahmy, Robert M. Koerner and Leonard J. Sansone, GT Apr. 94, p661-677.

Notional-Load Plastic-Hinge Method for Frame Design, J. Y. Richard Liew, D. W. White and W. F. Chen, ST May 94, p1434-1454.

Rheological Evaluation of Engineered Asphalt Binders, H. U. Bahia and N. I. Kamel, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994).

Variation of Ductility Capacity of Steel Beam-Columns, Masayoshi Nakashima, ST July 94, p1941-1960.

Load resistant design factor

Design Implications of Advanced Analysis in LRFD, J. Y. Richard Liew and W. F. Chen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1167-1172.

Flexural Member Bending Strength Limits in the New LRFD Bridge Code, Karl H. Frank, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p544-548.

Load and Resistance Factors for Bridge Design Code, Andrzej S. Nowak, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p538-543.

LRFD Provisions for Wood Bridges, Michael A. Ritter and Andrzej S. Nowak, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p549-554.

Seismic Behavior of Type PR Steel Frames, K. S. Sivakumaran and Sanjiang Chen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p585-590.

Unified Code Provisions for Concrete Bridges, Antoine E. Naaman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p555-560.

Load shifting

Concrete Beams with Externally Bonded Crabon Fiber Reinforced Plastic (CFRP) Strips, R. L. Sierakowski, C. A. Ross, J. W. Tedesco and M. L. Hughes, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p139-146.

Load tests

Bearing Capacity of Soils, U.S. Army Corps of Engineers, Department of the Army, 1993, 0-87262-997-X, 145pp. Behavior Prediction for Spread Footings on Sand, Sujit K. Bhowmik, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p245-248

Comparison of Settlement Predictions for Single Piles in Sand Based on Penetration Test Results, James B. Nevels and Donald R. Snethen, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1028-1038.

Conical Test Load Measuring Compressibility, John H. Schmertmann, GT May 93, p965-971.

Creep and Shrinkage Deflections of RC Beams with Steel Fibers, Kiang-Hwee Tan, P. Paramasivam and Kah-Chai Tan, MT Nov. 94, p474-494.

Damage Detection in Structures Based on Feature-Sensitive Neural Networks, Z. Peter Szewczyk and Prabhat Hajela, CP Apr. 94, p163-178.

Design and Field Performance of a Metal-Plate-Connected Wood Truss Bridge, Michael H. Triche, Michael A. Ritter, Stuart L. Lewis and Ronald W. Wolfe, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1310-1315.

Design of Socketed Drilled Shafts in Limestone, M. C. McVay, F. C. Townsend and R. C. Williams, GT Oct. 92, p1626-1637.

Design, Construction and Performance of a Soil Nailed Wall in Puerto Rico, Suang S. Cheng and Lawrence A. Hansen, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p1-16.

Displacement of Batter Piles in Layered Soil, A. S. Yalcin and G. G. Meyerhof, (Vertical and Horizontal Deforma-tions of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p975-985.

Estimation of Spread-Footing Settlement on a Sand Subgrade, John S. Horvath, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p145-

Experimental Study on the Buckling Behavior of a Triodetic Aluminum Space Frame: No. 2 Ultimate Bearing Strength of a Single Layer Space Frame, Kenichi Sugizake and Shigeru Kohmura, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p479-488.

Guardrail in Posttensioned Timber-Bridge Specimen, Richard M. Gutkowski, Patrick J. Pellicane and Jean-Francois Kalin, ST Dec. 94, p3435-3455.

Introduction, Albert F. DiMillio, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p4-10.

Mechanisms of Shaft Friction in Sand from Instrumented Pile Tests, B. M. Lehane, R. J. Jardine, A. J. Bond and R. Frank, GT Jan. 93, p19-35.

Mitigation Measures for Small Structures on Collapsible Alluvial Soils, Kyle M. Rollins and G. Wayne Rogers, GT Sept. 94, p1533-1553.

Old Concrete Slab Bridges. I: Experimental Investigation, A. Azizinamini, T. E. Boothby, Y. Shekar and G. Barnhill, ST Nov. 94, p3284-3304.

Old Concrete Slab Bridges. II: Analysis, A. Azizinamini, Y. Shekar, T. E. Boothby and G. Barnhill, ST Nov. 94,

Predicted and Measured Behavior of Five Spread Footings on Sand, Geotechnical Special Publication No. 41. Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994, 0-7844-0025-3, 230pp.

Settlement '94, Franco Ariemma, Avtar S. Vasu, Fred Agostino and Judith S. Doyle, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p192-

Settlement Evaluation for Cap Closure Performance, Edward M. Zamiskie, M. Golam Kabir and Andre Haddad, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p462-475.

Settlement Predictions Footing Load Tests on Sand, Kenneth E. Tand and Pickett Warden, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p196-198.

Settlement Predictions Footing Load Tests on Sand, Erik Funegard and Pickett Warden, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p199-

Spread Footing Settlement Prediction for ASCE Specialty Conference °SETTLEMENT '94°, Jon R. Foshee, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p186-187.

Static Response of Fiberglass Pretensioned Columns, Mohsen Issa, Rajan Sen, Daniel Mariscal and Mohsen Shahawy, ST Dec. 94, p3634-3648.

Test and Prediction Results for Five Large Spread Footings on Sand, Jean-Louis Briaud and Robert Gibbens, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p92-128.

Theoretical and Experimental Evaluation of FRP Components and Systems, Sotiris N. Sotiropoulos, Hota V. S. GangaRao and Ahmed N. K. Mongi, ST Feb. 94, p464-

Ultimate Load Test of Slab-on-Girder Bridge, Baidar Bakht and Leslie G. Jaeger, ST June 92, p1608-1624.

Load tests, foundations

Footing Load Tests on Sand, Kenneth Tand, Erik Funegard and Pickett Warden, (Vertical and Horizontal Deforma-tions of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p164-178.

Large-Scale Loading Tests of Shallow Footings in Pneumatic Caisson, Osamu Kusakabe, Yoshito Maeda and Masatoshi Ohuchi, GT Nov. 92, p1681-1695.

Pile Settlement Based on Dynamic Measurements, Samuel G. Paikowsky, Valerie A. LaBelle, John E. Regan and G. Parkowsky, valerie A. Labelle, Joini E. Regaii and Les R. Chernauskas, (Vertical and Horizontal Deforma-tions of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p269-278.

Testing and Predicting the Movement of a Drilled Shaft in New Mexico, Koon Meng Chua, Wimpie A.N. Aspar and Robert Meyers, (Vertical and Horizontal Deform tions of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p279-290.

Uplift Load-Displacement Behavior of Grillage Foundations, Fred H. Kulhawy and Harry E. Stewart, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed.,

1994), p233-244.

The Usefulness of Stone Columns to Reduce Settlements and Distortions - A Case History, Enrico Brignoli, Angelo Garassino and Pietro Renzo, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p561-570.

Load transfer

Design of Underpinning Piles to Reduce Settlements, H. G. Poulos, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1000-1010.

Elastic Critical Loads for Plane Frames by Transfer Matrix Method, Stavros Syngellakis and Esmat S. Kameshki, ST

Apr. 94, p1140-1157

Load Transfer Determination for Airfield Pavements Using the Falling Weight Deflectometer, Michael I. Hammons and David W. Pittman, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p523-530.

Perimeter Load Transfer in Model Drilled Shafts Formed under Slurry, R. E. Majano, M. W. O'Neill and K. M. Hassan, GT Dec. 94, p2136-2154.

Beam-Buckling Analysis via Automated Rayleigh-Ritz Method, C. M. Wang, L. Wang and K. K. Ang, ST Jan. 94, p200-211.

Compressibility for Sand Under One-Dimensional Loading Condition, Ching S. Chang, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1298-1311.

Cyclic Loading for the Measuring of Soil Consolidation Parameters, Alain Vuez and Abdou Rahal, (Vertical and Horizontal Deformations of Foundations and Embank-ments, Albert T. Yeung, ed. and Guy Y. Félio, ed.,

1994), p760-774.

Evaluation of Thermo-Hydrological Performance in Support of the Thermal Loading Systems Study, Thomas A. Buscheck, John J. Nitao and Steven F. Saterlie, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p592-610.

Hydraulic Transients in Two Acid Transfer Lines, Muin M. Baasiri, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p129-151.

Impacts of Repository Thermal Loading on System Cost, L. D. Rickertsen and W. W. Matyskiela, (High Level Ra-dioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p586-591.

Load-Eccentricity Effects on Cold-Formed-Steel Lipped-Channel Columns, Thomas H. Miller and Teoman

Pekoz, ST Mar. 94, p805-823.

Measurements and Numerical Modelling of High Rise Building Foundations on Frankfurt Clay, Eberhard Franke, Bernd Lutz and Yasser El-Mossallamy, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1325-1336.

Nonlinear Model for Dynamic Axial Pile Response, Mohamed H. El Naggar and Milos Novak, GT Feb. 94,

p308-329.

Reliability of Underground Pipelines Subject to Corrosion, M. Ahammed and R. E. Melchers, TE Nov./Dec. 94,

p989-1002.

Site Characterization Plan Thermal Goals Reevaluation. Steven F. Saterlie and J. C. de la Garza, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p882-889.

Stresses Induced by Surficial and Deep Loading in Elastic Medium, Olivier Rossa and Gabriel Auvinet, GT Aug.

92, p1241-1246.

Substantiated Risk Assessment of Jacket Structure, P. S. Tromans and J. W. van de Graaf, WW Nov./Dec. 94, p535-556.

Surface Payload Unloading and Deployment Options for a Lunar Return Mission, John Connolly and Larry Toups, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed.,

1994), p1059-1069.

Thermal Finite Element Analyses of 26 Waste Package Spent Nuclear Fuel Loading Configurations, A. O. Thompson and M. J. Plinski, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p796-800.

gram Committee, 1994), p.790-800.
TOPAZ II Qualification and Nuclear Testing Program, G.
L. Schmidt, F. Thome, B. Ogloblin and E. Glushkov,
(Engineering, Construction, and Operations in Space
IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed.,
1994), p.729-738.

Tributary Loading with a Terrain Following Coordinate System, David P. Podber and Keith W. Bedford, (Estua-System, David P. Pouber and Keith W. Bedrord, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p475-488.
Two New Methods of Fictitious-Crack Model and Their Applications, Yuan N. Li, Michael Müller and J.-D. Worner, EM Dec. 94, p2604-2620.

Loading history

Algorithm for Hysteresis Analysis of Prestressed-Concrete Frames, Xiaozu Su and Bolong Zhu, ST June 94, p1732-1744.

Fatigue Lifetime with Load Uncertainty Represented by Convex Model, Yakov Ben-Haim, EM Mar. 94, p445-

Loading machines

Developing Plans for Robotic Excavators, Sanjiv Singh, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p88-96.

Loads

Above and Below Boiling Thermal Loading Strategies for Large Waste Packages, Marvin L. Smith, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2146-2151.

Allowable Design Loads for Marman Clamp Systems, Robert DiTolla and Michael Ernst, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p217-226.

Analysis of Concrete Construction Live Loads on Newly Poured Slabs, Saeed Karshenas and Haitham Ayoub, ST

May 94, p1525-1542

Analytical Approach to Collapse Mechanisms of Circular Masonry Arch, Carlo Blasi and Paolo Foraboschi, ST Aug. 94, pe2288-2309.
Analytical Solution for Bending of Coaxial Orthotropic

Cylinders, Claude Jolicoeur and Alain Cardou, EM Dec.

94, p2556-2574.

Basics of Flexible Pipe Structural Design, R. C. Prevost and K. K. Kienow, TE July/Aug. 94, p652-671.

Behavior of RC Beams under Sustained Load, Nie Jianguo and Shen Jumin, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p239-244.

Buckling of Plates with Stiffening Elastically-Restrained Edges, Raymond H. Plaut and Ardéshir Guran, EM Feb.

94, p408-411.

Buckling of Single Layer Latticed Dome under Uniform Gravity Load, Masumi Fujimoto, Katsuhiko Imai and Toshitsugu Saka, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p509-518.

Buckling Solutions of Rectangular Mindlin Plates under Uniform Shear, C. M. Wang, Y. Xiang and S. Ki-tipornchai, EM Nov. 94, p2462-2470.

Class A Prediction of Shallow Footing Settlements, Harry G. Poulos, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p133-136.

Computer Analysis of Continuous P/C Highway Bridge Girders with Variable Depth, Hani Melhem and Weiqun Zhang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p696-703.

Consequential Fire Loads on Structures, Donald O. Dusenberry, (Structures Congress XII, N. C. Baker, ed. and

Barry J. Loodno, ed., 1994), p996-1001.

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Convergence Rates of the Method of Successive Elastic Solutions in Thermoplastic Problems of a Layered Concentric Cylinder, Todd O. Williams and Marek-Jerzy Pindera, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p348-357.

Pindera, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p348-357.
CPT-Based Prediction of Footing Response, Paul W. Mayne, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p214-218.

Development of Bridge Live Load Models, John M. Kulicki, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p532-537.

Effects of Sea Surface Movement on Offshore Structures, G. D. Hahn, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1478-1483.

Estimating Annual Urban Nonpoint Pollutant Loads, Robert D. Chandler, ME Nov /Dec. 94, p50-59. Fatigue Lifetime with Load Uncertainty Represented by Convex Model, Yakov Ben-Haim, EM Mar. 94, p445-

Convex Model, Yakov Ben-Haim, EM Mar. 94, p445-462. Field Tests of Railway Bridges, D. A. Foutch, D. H. Tobias

and J. Choros, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1118-1123.

Fracture Analysis of Bolted Timber Connections, Ian

Smith and Lin J. Hu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p912-917. FRP Box-Beams Under Long-Time Static and Fatigue

Loading, Urs Meier, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p411-416. Guide for the Design of Prestressed Concrete Poles, William Y. Ford, (Structures Congress XII, N. C. Baker, ed.

and Barry J. Loodno, ed., 1994), p591-596. Guidelines to Minimize Floor Vibrations from Building Occupants, Sarah E. Mouring and Bruce R. Ellingwood,

ST Feb. 94, p507-526.

Heterogeneous Hardening Plasticity Model for Concrete,
H. C. Chan, Y. K. Cheung and Y. P. Huang, ST Jan. 94,

H. C. Chan, Y. K. Cheung and Y. P. Huang, ST Jan. 94 p46-62.

Hollow Spheres Subjected to Sustained and Variable Loads, Wei Jiang, EM June 94, p1343-1368. Importance of Speed and Frequency in Flexible Pavement

Importance of Speed and Frequency in Flexible Pavement Response, M. S. A. Hardy and D. Cebon, EM Mar. 94, p463-482.

Impulse Effect on Redundancy of a Tied-Arch Bridge, Leon L-Y. Lai, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p712-719.

Interface Shear Stress in Overlaid Concrete Pavements, C. M. Lau, T. F. Fwa and P. Paramasivam, TE Mar./Apr. 94, p163-177.

Load - Settlement Predictions for Spread Footing Event, Vincent Silvestri, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p141-144.

Load Duration Effects in an 85-Year-Old Timber Structure, J. B. Mitchell, K. J. Fridley, M. O. Hunt and J. F. Senft, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p73-78.

Load-Settlement Characteristics of Spread Footings, V. A. Diyaljee, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p249-252.

Mechanical Behavior of Dowels Embedded in Concrete, Luigi Biolzi and Natalino Gattesco, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p630-635.

Minimum Design Loads for Buildings and Other Structures (ASCE 7-93), Revision of ANSI/ASCE 7-88 (St No. 93-007), American Society of Civil Engineers, 1994, 0-87262-904-X, 135pp.

Nonlinear Finite-Element Model of Complete Light-Frame Wood Structures, Bohumil Kasal, Robert J. Leichti and Rafik Y. Itani, ST Jan. 94, p100-119.

Numerical Simulations of Monotonic and Cyclic Loading of Granular Soil, Tang-Tat Ng and Ricardo Dobry, GT Feb. 94, p388-403.

One-Dimensional Shock and Quasi-Static Liquefaction of Silt and Sand, Jane M. Bolton, Deanna S. Durnford and Wayne A. Charlie, GT Oct. 94, p1874-1889. Parameters Affecting Distortional Buckling of Tapered Steel Members, Hamid Reza Ronagh and Mark Andrew Bradford, ST Nov. 94, p3137-3155.

Peak Load Determination in Linear Fictitious Crack Model, Yuan N. Li and Robert Y. Liang, EM Feb. 94, p232-249.

Postbuckling Response of Doubly-Curved Shallow Panels Under Complex Loading Conditions, L. Librescu and M. Y. Chang, Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p116-126.

Predicted Load-Settlement Behavior of Spread Footings on Sand, Casan L. Sampaco, Loren R. Anderson, Joseph A. Caliendo, Abdel Agallouch, Hogan Chang, Chia-Ching Lin, Elhassan Elhassan, Kyle Gorder, Roger Greaves, Makarand S. Jakate, Won C. Kim, Arthur L. Moss and Darrin Sjoblom, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p232-235.

Predicting the Load-Displacement Behaviour of Spread Footings on Sand, Guido Gottardi and Paolo Simonini, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p236-239.

Predicting the Settlement of the Texas A&M Spread Footings on Sand, G. Wiseman and J. G. Zeitlen, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p129-132.

Prediction of Foundation Load/Settlement Characteristics, John Scott and Keith Nicholls, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p177-181.

Prediction of Settlement of Footings on Sand, G. Mesri and M. Shahien, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p188-191.

Prediction of Settlement of Spread Footings, Luciano Décourt, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p210-213.

Progress in Reinforced Concrete Column Design, R. Green, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p455-460.

Progress in Reinforced Concrete Column Design: An Introduction, S. Ali Mirza, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p429-431.

QUAL2E Simulations of Pulse Loads, Raymond Walton and Mary Webb, EE Sept./Oct. 94, p1017-1031. Rational Limits for Longitudinal Steel in Concrete Columns, ASCE-ACI Committee 441-Concrete Columns,

unns, ASCE-ACI Committee 441-Concrete Columns, Subcommittee on Longitudinal Reinforcement Limits, (Furlong, Richard W., chmn.), (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p438-443.

Regularized Method in Limit Analysis, Gong-Liang Jiang, EM June 94, p1179-1197.

Rugged Computer to Aid Bridge Inspection, CE Sept. 94, p96.

SDC Detector Foundation Requirements for the SSC, J. L. Western, M. W. Butalla, H. James Krebs and Gary W. Tulk, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p767-772.

Second Order Directional Wave Kinematics in Shallow Water, Jagat N. Sharma and R. G. Dean, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p165-179.

Seismic Design of RC Structural Walls with Unsymmetrical Cross-Sections, John W. Wallace and Sharon L. Wood, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p43-48.

Sensors and Techniques for Structural Monitoring, R. D. Marshall, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1379-1384.

Settlement of Spread Footings on Granular Soil, Chandra S. Brahma, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p160-163. Simplified Calculation Method for Force Transfer in Composite Columns, Jan A. Wium and Jean-Paul Lebet, ST Mar. 94, p728-746.

Speeding Up Pavement Testing, ET Oct./Nov. 94, p10.

Spread Footing Prediction Event, Ching L. Kuo and Sayed M. Sayed, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p219-223.

Spread Footing Prediction Event at the National Geotechnical Experimentation Site on the Texas A&M University Riverside Campus, David Thomas, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p149-152.

Spread Footing Settlement Prediction for the National Geotechnical Experimentation Site Prediction Event: Settlement '94, P. Cooksey, Q. Tang, M. Zhao, M. Mauldon and E. Drumm, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p173-176. Stable Reinforced-Concrete Section-Analysis Procedure,

C. R. Thewalt and B. Stojadinović, ST Oct. 94, p3012-

3024

A Study of Jointless Bridge Behavior, D. Siros and C. Spyrakos, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p485-490. Teaching Structural Loading: A Case Study, R. Panneer Selvam, (Structures Congress XII, N. C. Baker, ed. and

Barry J. Loodno, ed., 1994), p1375-1378.
Test and Prediction Results for Five Spread Footings on Sand, Jean-Louis Briaud and Robert M. Gibbens, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1897-1898.

Test Experience with Heavy Angle Dead End Lattice Transmission Towers, J. M. Ferguson, D. D. Cannon and R. E. Nickerson, (Structures Congress XII, N. C. Baker,

ed. and Barry J. Loodno, ed., 1994), p601-606. When are Loads Taught? A Case Study and National Trends. Richard J. Schmidt, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1358-1363.

Where do the Arrows Come From? Evaluating Structural Loads, Duane S. Ellifritt, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1364-1368.

Contractor Entitled to Recover Damages from Project Lender, CE May 94, p30.

The Small Reclamation Projects Loan Program A Development Tool For The 90's, Loretta C. Lohman, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p119-

Local governments

Centralized Government Control: A Bad Idea, Paula P. Easley, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p53-78.

Concurrency-Management Practices in Florida: Comparative Assessment, Greg Stuart, UP June 94, p59-73.

Cooperative Ground-Water Resources Management: Local Perspective, Amleto A. Pucci, Jr., WR Nov./Dec. 94, p984-991.

Drawing Conclusions as to Environmental Regulation, awiliam Whipple, Jr., Harlan Agnew, Michael L. Clar, Robert Fiehweg, Tad Foster, Howard Holme, Marshall Jennings, Jonathan Jones, Jona Lee, Jan Rosbolt, Charles Sain, Kyle Schilling, Earl Shaver and Don Woodward, Waster Willows Beautiful William (1997). (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p258-271.

Engineers Must Play Power Game of Politics, CE Nov. 94,

The Interactive Process: A Formal Means to Improved Re-lations, Allen Benson, A. C. Robison, Paul E. Seidler and Michelle D. Ulick, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p56-62.

MPOS Become VIPS, John Prendergast, CE Apr. 94, p40-

Location

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Characteristics of Supercritical Flow below Sluice Gate, Iwao Ohtsu and Youichi Yasuda, HY Mar. 94, p332-

Engineers' Salaries: It's Not What You Do, but where You Do It that Counts, NE Apr. 94, p15.

Methodology for Optimum Sensor Locations for Parameter Identification in Dynamic Systems, Firdaus E. Udwadia, EM Feb. 94, p368-390.

Analysis of Port Allen Lock in Elastic-Plastic Soil Medium, Hsi Chi Yang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p865-872.

Design and Operation of a System to Monitor Sediment Deposition for Protection of an Endangered Mussel, Mi-chael S. Griffin and David S. Mueller, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p472-481.

Life (and Travel) on the Mississippi Gets Better, CE Aug.

Locking Into Success, Brian H. Greene, Andrew Schaffer, Donald A. Bruce and John A. Gerlach, CE Apr. 94, p48-50.

Management of Sediments on the Red River Waterway Project, Phil G. Combs, C. Fred Pinkard, Jr., William H. Espey, Jr. and Ben Littlepage, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1125-1130.

Metamodeling Approach for Approximating the Operating Characteristics of Series of G/G/I Queues on Congested Waterways, Melody, D. M. Dai and Paul Schonfeld, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p490-497.

The Navigation Data Center and Its Role in Dredging Management, Virginia R. Pankow, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p490-498.

Verification of Lake Superior Outflow Equations, Scott J. Thieme, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p462-

Logging

Intermediate Support Cable Logging Systems, James W. Charland, Alan G. Hernried and Marvin R. Pyles, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p791-800.

Logistics

Logistics Carriers for the First Lunar Outpost, Thomas M. Polette, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1046-1058.

A Minimum Mars Mission Approach, Systems Engineering Division Mars Study Team, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1309-1322.

Long Island Sound

Demonstration of the Wes New York Bight Hydrodynamic Model in Long Island Sound, S. Rao Vemulakonda and Norman W. Scheffner, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p309-322.

Development of Long-Term Three-Dimensional Hydrody-namics in Long Island Sound for Use in Water Quality Modeling, Richard A. Schmalz, Jr., (Hydraulic Engi-neering '94, George V. Cotroneo, ed. and Ralph R. Runeering '94, George V. Cotro mer, ed., 1994), p1316-1320.

Numerical Decomposition of Eulerian Residual Circulation in Long Island Sound, Richard A. Schmalz, Jr., (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p294-308.

Analysis of Prototype Long Period Waves for Los Ange-les/Long Beach Harbor Resonance Studies, William C. Seabergh, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p15-27.

The Daytona Beach "Large Wave" Event of 3 July 1992, Robert J. Thieke, Robert G. Dean and Andrew W. Gar-cia, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p45-

Measured Total Wave Climate of a Small Craft Harbor, Chuck Mesa, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed.,

1994), p90-104.

Measurement and Analysis of Wave Data in Los Ange les-Long Beach Harbors, James Rosati, III and Paul T. Puckette, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p223-235.

Page 1-203.
Numerical Modeling of Waves in Harbors, Edward F. Thompson, H. S. Chen and Lori L. Hadley, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p590-601.

On the Generation of Infragravity Waves by Shoaling Multidirectional Waves, Okey Nwogu, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p1-14.

The Role of Long Waves in Sand Bar Formation - a Model Exploration, Tim O'Hare, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C.

Kraus, ed., 1994), p74-88.

Short and Long Wave Transformation Modelling in a Large Scale Flume, Luc Hamm and J A. (Dano) Roelvink, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p503-

Loss reduction

One Engineer's Wish List for Hurricane Hazard Mitigation, Ronald F. Zollo, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p268-277.

Recent Advances In Well Hydraulics, Otto J. Helweg and S. Sunita, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel,

ed., 1994), p608-611.

Wetland Loss Rates and Agricultural Drainage, Aaron J. Douglas, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p545-548.

Losses

Demonstrated Success in Reducing Risk of Losses in a Severe Hurricane: Hurricane Omar Experience, Juan C. Tenorio and Jack B. Jones, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p716-725.

Evaluation of Methods for Predicting Bend Loss in Mean-dering Channels, C. S. James, HY Feb. 94, p245-253. The Human Impact of Hurricane Iniki, James K. Mitchell,

(Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p259-267.

In Situ Photothermal Deflection Spectroscopy of Uranium Dioxide Dissolution, James D. Rudnicki, Richard E. Russo and David W. Shoesmith, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2609-2615.

Relationship Between Residential Insurance Losses and Wind Conditions in Hurricane Andrew, Peter R. Sparks and Shiraj A. Bhinderwala, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p111-124.

Unforeseen Conditions Don't Break Fix Costs, CE Mar. 94, p27.

Are Building Codes and/or Enforcement Adequate for Hurricane Protection? Lindsey E. Carter and Gary G. Ni-chols, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p626-631.

Beneficial Uses of Dredged Material: Part of the Solution to Restoration of Louisiana's Coastal Wetlands, Linda Glenboski Mathies, (Dredging '94, E. Clark McNair, Jr.,

ed., 1994), p626-630.

Bridge Rating Using Influence Surface for Curved Bridge Structures, C. C. Fu, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p688-695.

Concrete-Canoe Finals Head South This Year; 20 Teams to Compete in New Orleans, CE June 94, p75-76

Contractor's Procedural Failure Opens Door to Arbitration,

CE Nov. 94, p26. Flood Monitoring Network In Southeastern Louisiana, Brian E. McCallum, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p346-

Indefinite Plans Beg at Indefinite Bids, CE Mar. 94, p27. Louisiana Plan Would Link Air, Land and Sea Travel, CE

Jan. 94, p25.

Performance of Manufactured Housing in Louisiana During Hurricane Andrew, Marc L. Levitan, Leighton S. Cochran and Janet E. Levitan, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p166-175.

Use of Abandoned Pipeline to Transport Sediment to Marshes, Charles H. Coates, Jr., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1101-1110.

Water Injection Takes the Bucket Out of Dredging, CE

Oct. 94, p21-22,24.

Low-Flow Frequency Analysis with Censored Data, Chuck Kroll and Jery Stedinger, (Water Policy and Manage-ment: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p786-789.

Parametric Evaluation of Cross-Flow Turbine Performance, V. R. Desai and N. M. Aziz, EY Apr. 94, p17-34.

Pressure-Time Flow Rate in Low Head Hydro Plants, Charles W. Almquist, David B. Hansen, Gerald A. Schohl and Patrick A. March, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p445-453.

Low-rise buildings

Diaphragm Action of Cladding in Low-Rise Metal Buildings, Bala Sockalingam, David Montgomery, Scott Schiff and Peter Sparks, (Structures Congress XII, N. C.

Schill and Feter Sparks, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1048-1053. Field Experiments for Wind Effects on Low Buildings, Kishor C. Mehla, Douglas A. Smith and Byron B. Yeatts, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1451-1456.

Statistical Analysis of Wind Dawgas to Sigale Emilies.

A Statistical Analysis of Wind Damage to Single-Family Dwellings Due to Hurricane Hugo, Serji Amirkhanian, Peter Sparks and Sandy Watford, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1042-1047.

Wind Loads on Low Rise Structures: A Survey, B. L. Sill and T. A. Reinhold, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1030-1035.

Wind Loads on Roofs of Low Rise Structures: Buffeting or Interaction, Henry W. Tieleman, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p350-361.

The Winds of Change? Paul Tarricone, CE Jan. 94, p42-45.

Lysimeters

Evapotranspiration by Young Florida Flatwoods Citrus Trees, Brian J. Boman, IR Jan./Feb. 94, p80-88.

Observations on the Growth of an Internal Boundary Layer with a Lidar Technique, Chia R. Chu, Marc Parlange, William Eichinger and Gabriel Katul, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p519-529.

Partitioning of Evapotranspiration Using Lysimeter and Micro Bowen-Ratio Systems, Hossein Ashktorab, W. O. Pruitt and K. T. Paw U, IR Mar./Apr. 94, p450-464.

Machine foundations

Coupling Translation and Rocking Motions, J. P. Lee and J. A. Bohinsky, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p61-66.

Vibration of Foundations on Incompressible Soils with No Elastic Region, Ronaldo I. Borja and Wen-Hwa Wu, GT Sept. 94, p1570-1592.

Machinery

Application of Heavy Duty Roadheaders for Underground Development of the Yucca Mountain Exploratory Study Facility, Jamal Rostami, Levent Ozdemir and David M. Neil, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

The Challenge of Mining He-3 on the Lunar Surface: How All the Parts Fit Together, Igor N. Sviatoslavsky, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994),

Control Model for Robotic Backhoe Excavation and Obstacle Handling, Xiaodong Huang and Leonhard E. Bernold, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p123-130. Development of a Mechanical Alcove Excavator for the

Yucca Mountain Exploratory Study Facility, Erika Rönnkvist, James E. Friant and Levent Ozdemir, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p411-416.

Intelligent Excavator Control for a Lunar Mining System, Paul J. A. Lever, Fei-Yue Wang and Deqian Chen, (Robotics for Challenging Environments, Laura A. Demsetz.

ed. and Paul R. Klarer, ed., 1994), p97-105.

Navigation of an Autonomous Robot Vehicle, Arturo L. Rankin, David G. Armstrong, II and Carl D. Crane, III, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p44-51. Onika: A Multilevel Human-Machine Interface for Real-

Time Sensor-Based Systems, Matthew W. Gertz and Pradeep K. Khosla, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed. and Paul R. Klarer, ed.,

1994), p28-36.
Planning Intricate Robot Motions to Remove Natural Materials, Sudheer M. Apte and Irving J. Oppenheim, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p106-114. Quarter Mile Long Machine Assists Rail Rehab, CE Apr.

94, p107. Tunnel Boring Machine for Nuclear Waste Repository Research Project, Hans A. Janzon, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p403-410.

A Tunnel Boring System for the Yucca Mountain Project, Steven N. Short, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Com-

mittee, 1994), p381-385.

Magnesium

Magnesium-Sodium Sulfate Attack in Plain and Blended Cements, Rasheeduzzafar, Omar Saeed Baghabra Al-Sahel N.i Abduljauwad and Mohammad Maslehuddin, MT May 94, p201-222.

Magnetic field effects

Magnetic Tracing of Beach Sand: Preliminary Results, Kuno D. van der Post, Frank Oldfield and George Voulgaris, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p323-334.

Very Low Frequency Radio Astronomy from Lunar Orbit, Nebojsa Duric and Jack O. Burns, (Engineering, Con-struction, and Operations in Space IV, Rodney G. Gal-loway, ed. and Stanley Lokaj, ed., 1994), p1382-1389.

Magnetic fields

Buoy Directional Wave Measurements Using Magnetic Field Components, David W. Wang, C. C. Teng and R. Ladner, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p316-329.

Construction Materials, Once Tagged, Could Tell All, ET Oct./Nov. 94, p9.

Gravity and Megnetic Investigations of Yucca Wash, Southwest Nevada, V. E. Langenheim and D. A. Ponce, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2272-2278.

At Maine Water-Treatment Plant, It's Ozone Only, CE May 94, p12-13.

Tire Chips Used as Pothole Preventers, CE Dec. 94, p19.

Maintenance

An Artificial Neural Network Approach to Pavement Maintenance Decision Support System, Abdullah M. Alsugair and Essam Sharaf, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p942-949.

Assessing Fitness for Purpose of Offshore Platforms. II: Risk Management, Maintenance, and Repair, H. Banon,

ST Dec. 94, p3613-3633.

A Bridge-Deck Deal Without Reinforcing Steel, ET Dec. 94/Jan. 95, p1,6.

Budgeting for Facility Repair and Maintenance, A. L. Barco, ME July/Aug. 94, p28-34.

Constant-Speed Pubping Stations Can Clean Up for the First Time, ET Apr./May 94, p7.

Design, Construction, and Maintenance of Relief Wells, US Army Corps of Engineers, 1993, 0-87262-955-4,

Effects of Routine Maintenance on Flexible Pavement Condition, Abdullah I. Al-Mansour, Kumares C. Sinha and Thomas Kuczek, TE Jan./Feb. 94, p65-73.

Groundwater Management and Systems Operations Optimization Utilizing Supply, Well Reliability, and Demand Distribution as Decision-Making Criteria, Kathlie Suyn Jeng and Jerry Rogers, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p77-80.

Heuristic Algorithms for Aggregating Rail-Surface-Defect Data, Roemer M. Alfelor and Sue McNeil, TE Mar./Apr.

94, p295-311.

Hocking River Sedimentation Study, Jon B. Fripp, Kenneth C. Halstead and Surya Bhamidipaty, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1120-1124.

Hurricane Shelter Design Criteria for Public Schools, Ajay Shanker, R. Wayne Drummond, Raja R. Issa and Kalika Wamanacharya, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p233-240.

Identification of Problems, Solutions, and Cost Savings for Maintenance of Drainageways, Mark R. Hunter, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p194-208.

The Integrated Systems Approach to Facilities Management, Robert A. Snodgrass, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2199-2207.

Interactive Design of Service Routes, Jin-Yuan Wang and Jeff R. Wright, TE Nov./Dec. 94, p897-913.

Long-Term Maintenance Plan for Vietnam Memorial, CE Oct. 94, p10,12.

Maintenance Management Systems for Urban Drainage, Neil S. Grigg, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p2-10.

Performance of Submerged Vanes for Control of Sediment in an Irrigation Canal, Steven W. Tanis, (Hydraulic En-'94, George V. Cotroneo, ed. and Ralph R. gineering

Rumer, ed., 1994), p1181-1185.

Prototype Object-Oriented System for Maintenance of Timber Trusses, S. H. C. Foo and G. Akhras, CP July 94, p326-344.

Sewerage Rehabilitation Verified Simulation Modeling, Phil Wildbore, (Urban Drainage Rehabilitation Pro-grams and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p73-83.

Sines Breakwaters Monitoring Program, C. Pita, F. Abecasis and A. Fernandes, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p408-427.

Standard Guidelines for the Design of Urban Subsurface Drainage (ANSI/ASCE 12-92) Standard Guidelines for Installation of Urban Subsurface Drainage (ASCE 13-93) Standard Guidelines for Operation and Maintenance of Urban Subsurface Drainage (ASCE 14-93) (St No. 92-012, 93-013, 93-014), American Society of Civil Engineers, 1994, 0-87262-996-1, 60pp.
Technologies for Planning Railroad Track Maintenance and Renewal, Donald Uzarski and Sue McNeil, TE

Sept./Oct. 94, p807-820.

Value Landscape Engineering, Frederick S. Liljegren, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p424-433.

West Breakwater Maintenance, H. Ligteringen and Fernando A. S. Oliveira, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p428-439.

Maintenance costs

The Hidden Cost of Clean Air Regulations, Bernard H. Hertlein and Matthew R. Johnson, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1119-1126.

Brits Banned in Malaysia, WP Special issue 94, p4. Malaysia's Twins: High-Rise, High Strength, Rita Robison,

Malaysia s 1 wins: High-Ruse, High Sucrigin, Rua Roomson, CE July 94, p63-65.

Project Case Study: Space Frame Roof Structure, Main Stadium, Shah Alam Sport Complex, Selangor, Malay-sia, James A. Moses, (Spatial, Lattice and Tension Struc-tures, John F. Abel, ed., John W. Leonard, ed. and Celina 11. Baeths and 10044, 2477-329.

U. Penalba, ed., 1994), p377-382. Station-Year Approach: Tool for Estimation of Design Floods, Henri Garros-Berthet, WR Mar./Apr. 94, p135-

Action-Response Model and Loss of Productivity in Construction, David W. Halligan, Laura A. Demsetz, James D. Brown and Clark B. Pace, CO Mar. 94, p47-64.

ADK, 1QM, Partnering, and Other Management Fantasies, F. H. "Bud" Griffis, El Oct. 92, p331-344.
After the Layoff, ME Sept./Oct. 94, p15.
Agroforestry Drainage Management Model: II: Field Water Flow, F. F. Karajeh and K. K. Tanji, IR Mar./Apr. 94, p382-396.

Boston and San Francisco Groups are Management Stars, NE Mar. 94, p5.

Business Engineer: Role for Consulting Civil Engineer in Year 2000, Mel Sears, ME Mar./Apr. 94, p35-38. CEOs Discuss People and Profits, ME Jan./Feb. 94, p13.

Conflict Management Using SHARED-DRIMS, Feniosky Peña-Mora, Duvvuru Sriram and Robert Logcher, (Computing in Civil Engineering, Khalil Khozeimeh, ed.,

1994), p1599-1606.
onstraint Management on Distributed AEC Configurations, Sanjai Tiwari and H. C. Howard, (Com-Constraint puting in Civil Engineering, Khalil Khozeimeh, ed.,

1994), p1607-1614.

Developing Quality-Improvement Processes in Consulting Engineering Firms, Daniel F. Predpall, ME May/June 94,

Dimensions and Management of Facility Performance, James C. Porter, El Jan. 94, p1-7.

Effects of Golf Course Management on Pesticide and Fer-tilizer Fate, S. K. Starrett, N. E. Christians and T. A. Austin, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p526-533.

Equipment Management through Operational Failure Costs, Athanase I. Tsimberdonis and E. Lile Murphree, Jr., CO Sept. 94, p522-535.

Firm Plugs in to Electronic Time Sheets, ME Nov./Dec. 94,

Flexible Extracation of Practical Knowledge from Bridge Databases, Yoram Reich, Steven J. Fenves and Eswara Subrahmanian, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1014-1021.

Holistic Approach to Irrigation Management in Developing Countries, Phillip Z. Kirpich, IR Mar./Apr. 93, p323-

Infrastructure Management: U.S. and Japanese Systems Contrasted, Neil S. Grigg, UP Mar. 94, p1-13.

Is Your Automated Information System Obsolete? Chester A. Shuman, ME Mar./Apr. 94, p24-26.

Judgemental Model of Engineering Management, J. V. Par-kin, ME Jan./Feb. 94, p52-57.

Leading Creative People as Consulting Engineering Be-comes Globalized, Brian J. Lewis, ME Mar./Apr. 94,

Managers Get Their Due, CE June 94, p8.

Managing Performance of Engineers, Tom D. McFarland, ME Sept./Oct. 94, p28-33.

Non-Point Source Pollution Reduction, J. Thomas Franques and Rhonda L. Townsend, (Hydraulic Engi-neering '94, George V. Cotroneo, ed. and Ralph R. Ru-mer, ed., 1994), p1252-1256.

Partnering for Success, Thomas R. Warne, 1994, 0-87262-

Pen Computing Can Streamline Site Inspections, ME Nov./Dec. 94, p12.

Planning and Management of Change, Robert M. Nelson, Jr., C. Thomas Statton and Robin K. St. Clair, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1722-

Poor Service Not Poor Design Drives, ME Nov./Dec. 94, p12.

Portfolio Approach to Strategic Management of A/E Firms, David Veshosky, ME Sept./Oct. 94, p41-47.

Process Model for Public Sector Design-Build Planning, Anthony D. Songer, C. William lbbs and Thomas R. Na-pier, CO Dec. 94, p857-874.

Procurement Issues, Delon Hampton, ME Nov./Dec. 94,

Progression of Computer Applications in Water Supply and Distribution Systems, Chun-Hou Orr, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p622-629.

Research and Development — Why bother? Robert J. Tichy, (Structures Congress XII, N. C. Baker, ed. and

Barry J. Loodno, ed., 1994), p683-688.

Reservoir Operation by the Use of an Expert System, Tiao J. Chang and David Moore, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p97-104.

Sewers and Computers, Rodolfo B. Fernandez and Brian W. Daniels, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p836-842.

Spotting Trends in Design and Construction, ME Nov./ Dec. 94, p13.

Towards Practical Machine Learning Techniques, Yoram Reich, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p885-892.

Towards Structural Strength and Safety Evaluation Within Bridge Management Systems, George Hearn, Dan M. Frangopol and Milanendu Chakravorty, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p290-295.

"...excellent communication skills required" for Engineering Managers, Todd A. Shimoda, 1994, 0-7844-0047-4,

113pp.

Management methods

ADR, TQM, Partnering, and Other Management Fantasies, F. H. "Bud" Griffis, El Oct. 92, p331-344.

Design Considerations for Night Storage in Irrigation Sys-tems, Wadie F. Mankarious, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p331-334.

Engineers and Managerial Challenges: A Transitional Per-spective, M. Ali Porbahaie, CE June 94, p73-74.

From Smoking Policies To Notebook Computers, ME Sept./Oct. 94, p15.

Geographically Distributed Decision Support; The Tennessee Valley Authority (TVA) TERRA System, Rene F. Reitsma, Peter Ostrowski, Jr. and Stephen C. Wehrend, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p311-314.

Joint Pond-Wetland System Performance in Colorado, Ben Urbonas, Bao Vang and Jay Carlson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p384-387.

Opportunities, Constraints and Change in Reservoir Management, William K. Johnson, David T. Ford and Ralph A. Wurbs, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p864-867.

Partnering Pardign, Herbert F. Harback, Donald L. Basham and Robert E. Buhts, ME Jan./Feb. 94, p23-27.

Partnering to Save Troubled Projects, Jim Brown, ME May/June 94, p22-25.

Process of Planning During Construction, Dora Cohenca-Zall, Alexander Laufer, Aviad Shapira and Gregory A. Howell, CO Sept. 94, p561-578.

Save That Employee Rather Than Fire, Anne Glad, ME July/Aug. 94, p16-18.

Team-Building Process: Key to Better Project Results, Robert Albanese, ME Nov./Dec. 94, p36-44.

Management planning

Barriers to Constructability Implementation, James T. O'Connor and Steven J. Miller, CF May 94, p110-128.

Decision Support System for Wetland Development at a Landscape Level, Luis A. Garcia, Rolando Vadas, Steffen Meyer, John Ternlund and Jack Cunningham, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

Development of a Long-Term Dredged Material Management Plan Chincoteague, Virginia, Tom B. Langley, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p359-

367.

Differentiating the Experience of Boater "Publics", Ellen B. Drogin, Andrew Holdnak, Alan R. Graefe and James M. Falk, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klanenik, ed., 1994), p132-139.

Establishing Management Information Systems for Multiproject Programs, Russell Zapalac, Karen Kuemmler and Tim Malagon, ME Jan./Feb. 94, p37-42.

Exploring Management Alternatives with Interactive Simulation, David I. Leib and Thomas C. Stiles, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p210-213.

Holistic Approach to Irrigation Management in Developing Countries, Phillip Z. Kirpich, IR Mar./Apr. 93, p323-333.

Ownership Transfer of Design Engineering/Construction Firms, James J. Casey, Jr. and Jeffrey S. Russell, ME Mar./Apr. 94, p66-67.

Packaging Benefits Packages, Michael W. Creed, Christie C. Allen and C. Janet Whitney, ME Jan./Feb. 94, p19-22.

ADR, TQM, Partnering, and Other Management Fantasies, F. H. "Bud" Griffis, El Oct. 92, p331-344.

Infrastructure Management: U.S. and Japanese Systems Contrasted, Neil S. Grigg, UP Mar. 94, p1-13.

Managers Get Their Due, CE June 94, p8.

Management systems

A Comprehensive Bridge Management System for Illinois, Allen R. Marshall, Todd Ahrens and Paul D. Thompson, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1859-1866.

Group Dynamics and Construction Project Manager, Pantaleo D. Rwelamila, CO Mar. 94, p3-10.

The Integrated Systems Approach to Facilities Management, Robert A. Snodgrass, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2199-2207.

Maintenance Management Systems for Urban Drainage, Neil S. Grigg, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p2-10.

Management Division Calls for Papers, ME Jan./Feb. 94,

Stochastic Optimal Control for Determination of Freshwater Inflows to Estuaries, Bing Zhao and Larry W. Mays, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p645-648.

ng: Getting it Right the Second Time, CE Jan. Work Plant 94, p11-12.

Management training After the Layoff, ME Sept./Oct. 94, p15.

Mentoring for Consulting Engineers, John Dionisio, ME Sept./Oct. 94, p16-19.

Managers

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Engineers and Managerial Challenges: A Transitional Perspective, M. Ali Porbahaie, CE June 94, p73-74.

Improving Project Management of Design, Stuart D. Anderson and Richard L. Tucker, ME July/Aug. 94, p35-

Manganese Controlling Lead and Copper Corrosion and Sequestering of Iron and Manganese, Jonathan A. Clement, Michael Schock and Darren Lytle, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p1-8.

The Relationship of Speciation to Iron and Manganese Re-moval Strategies, Kenneth Carlson, William Knocke and Kevin Gertig, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed.,

1994), p66-73.

Manholes

Hydrostatic Pressure Loading due to Ice Formation in Manholes, S. Tanary, A. Fahim and M. Munro, CR Dec. 94, p121-132.

Trenchless Sewer System Reconstruction Techniques, Lynn E. Osborn, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilita-tion Programs and Techniques, ASCE, 1994), p159-172.

Manifolds

Algorithm for Siphon-operated LPD Sewage Manifolds, Dennis L. Kaiser, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p424-438.

Manpower

Digger's Decline: A Fable for Civil Engineers, John A. Alexander, El July 93, p304-308.

Manufacturing

Analysis of Glass-Ceramic Production from Lunar Resources, W. H. Poisl, B. D. Fabes, D. Allen, S. Hawley and A. Carpenter, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1278-1287.

The Canadian Cement Industry: A Partner in Environmen-

nne Canadian Cement Industry: A Partner in Environmen-tal Improvement, Eric G. Fines, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p406-423. Critique - Manufactured Housing Session, Frank Walter, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad So-tani, ed., 1994), p203-212. Dynamics of Laminated Plates with Laver Waviness Pages

Dynamics of Laminated Plates with Layer Waviness, Raouf A. Raouf, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p109-115. Energy Analysis of High Temperature Lunar Manufactur-

ing Processes, Belinda Wong-Swanson and Rocco Fazmg Processes, Belinda Wong-Swanson and Rocco Faz-zolari, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p697-707. Evaluation of Design Wind Loads for Manufactured Homes and Needed Improvements, R. D. Marshall, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad So-tani, ed., 1994), p185-194.

tani, ed., 1994), p185-194.

Feasibility of Dual Technology in Manufacturing Lunar Concrete, Mohsen A. Issa and Husam A. Omar, (Engi-neering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p933-941.

For the Realization of Lunar Concrete, Hiroshi Kanamori, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p942-951.

Gypsum Plant Registers Under ISO, CE Dec. 94, p8

Hurricane Andrew's Effect on Manufactured Housing, Mike Mafi, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and

Mehrdad Sotani, ed., 1994), p158-165. Lunar Oxygen Production - A Maturing Technology, Carlton C. Allen, Gary G. Bond and David S. McKay, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994),

p1157-1166.

Lunar Oxygen Production in a Hydrogen "Cold" Plasma, Daniel E. Bullard, Peter E. Nolan and David C. Lynch, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1188-1198.

The Manufactured Home Dilemma, James R. McDonald, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad So-

tani, ed., 1994), p195-202.

Mechanics of Curved Fiber Bundles in Composites, David W. Jensen, Suresh P. Pai, Timothy R. Pickenheim and Colleen M. McCarty, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p276-286.

Oxygen Generation from Synthetic Moon Soil Using a Plasma Reactor, P. R. Taylor, S. A. Pirzada, K. A. Prisbrey, H. Gold and R. E. Hicks, (Engineering, Construc-tion, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1178-1187.

Performance of Manufactured Housing in Louisiana During Hurricane Andrew, Marc L. Levitan, Leighton S. Cochran and Janet E. Levitan, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p166-175.

Production of Lunar Concrete Using Molten Sulfur, Husam A. Omar and Mohsen Issa, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed.

and Stanley Lokaj, ed., 1994), p952-959.

Sintering Bricks on the Moon, Carlton C. Allen, John C. oraf and David S. McKay, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1220-1229.

Snap Buckling of a Delaminated Layer in a Composite Cylinder, Wan-Lee Yin, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p156-165.

Survivability of Manufactured Housing in Hurricanes, John M. Dye, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p176-184.

Manufacturing facilities

Developing Air-Emission Curbs, ET Dec. 94/Jan. 95, p10.

Mapping

3-D Coordinates - A Universal Rectangular Coordinate System for a GIS and Other Spatial Databases, Earl F. Burkholder, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p233-240.

Best Route GIS System, Siripong Malasri and L. Yu Lin, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p1123-1130.

Data Capture with GPS for Sewer Map Updates, John S. Gresh and Rodolfo B. Fernandez, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1615-1622

Generating Reinforcement in FE Modeling of Concrete Structures, Fariborz Barzegar and Srinivas Maddipudi, ST May 94, p1656-1662.

- GIS Application for Floodplain Analysis and Mapping, David J. Greenwood, Ramzi K. Bannura and Myles E. Powers, (Hydraulic Engineering '94, George V, Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p.232-
- A GIS Foundation Example, George Massey, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2175-2182.

Glossary of Mapping Science, ISBN: 1-57083-011-8, Joint Committee of the American Society of Civil Engineers, American Congress on Surveying and Mapping, and American Society for Photogrammetry and Remote Sensing, 1994, 0-7844-0050-4, 581pp.

GPS Mapping Van Hits the Road, CE Dec. 94, p11-12. Implementation of Knowledge-Based GIS: A Case Study. Gary S. Spring, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1332-1338.

Library of Congress Collecting GIS Maps, CE Apr. 94, p13.

Mapping 2-D and 3-D Velocity Components in Circular Conduits Using an Electromagnetic Current Meter and a 5-Hole Pilot Probe, Joseph J. Orlins and Lawrence J. Swenson, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p53-61.

Mapping Fractures Using Fresnel Volume Tomography, D. W. Vasco, John E. Peterson, Jr. and E. L. Majer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2648-

Mobile GIS Technologies, John Alexander, Jerry Merckel, Kirk Upthegrove and David Martini, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1623-1630.

Object Maps for Developing Automated Working Drawing Quality Control Procedures, M. Kevin Parfitt, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p1787-1790.

OTF Kinematic GPS Positioning for Vertical Reference Datum, Al Rougeau, Dean Pottle and Larry Rosenbalm, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p288-

Pipe Utility Evaluations With the Aid of GIS, Raymond A. Pittman, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p242-

Quality of Map Data in Geographic Information Systems, Gary A. Jeffress, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p221-224.

Range Determination Using Target Images, Fouad A. Ahmed, SU Nov. 94, p135-144.

Structural Character of the Northern Segment of the Paintbrush Canyon Fault, Yucca Mountain, Nevada, Robert P. Dickerson and Richard W. Spengler, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2367-2372.

Control Model for Robotic Backhoe Excavation and Obstacle Handling, Xiaodong Huang and Leonhard E. Ber-nold, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p123-130.

Flood Monitoring Network In Southeastern Louisiana, Brian E. McCallum, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p346-

GIS-Based Channel Extraction and Smoothing Algorithm for Distributed Hydrologic Modeling, Fred L. Ogden, Bahram Saghafian and Witold F. Krajewski, (Hydraulic Engineering '94, George V Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p237-241.

GLFSVIEW - GLFS Product Viewing Application, Yi-Fei P. Chu, Chieh-Cheng J. Yen and Keith W. Bedford, (Hy-draulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p207-211.

GPS Mapping Van Hits the Road, CE Dec. 94, p11-12.

Balancing Environmental Issues when Developing the Marina Project Scope, Jon Guerry Taylor, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p69-76.

Balancing Recreational, Economic Development and Environmental Protection Goals for New Recreational Boating Facilities in the State of Wisconsin, U.S.A. Fred Klancnik, James Rooney and Larry Freidig, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p7-19. 378

The Bladensbug Marina Revitalization Project, Wesley R. Johnson and Kevin H. Deis, (Marinas, Parks and Recre ation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p439-448.

Klancnik, ed., 1994), p439-448.
Chicago River Navigation Study, Michael A. Kraman, Nicholas Pansic and Vedat Demirel, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p321-332.
The Community Options Model®: A PC Tool for Evaluating Community Optiones for Marinas and Tourism, Dandrias Community Choices for Marinas and Tourism, Dandrias Community Choices for Marinas and Tourism, Dandrias Community Choices for Marinas and Tourism, Dandrias Choices for Marinas Choic

iel R. Talhelm, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p29-38.

Concept for a Mixed Use Recreational Harbor on Lake Superior, Kenneth M. Cobb and Dorian Grilley, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p104-113.

Conceptualization of Boat Access Development Zones, David G. White, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p605-614.

Environmentally Compatible Marinas the Major Issues that Need to be Addressed in Designing New and Retrofitting Existing Marinas, Daniel S. Natchez, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p49-58.

The Evolving Role of Marinas as Public Marine Parks and Water Recreation Areas in Southern California 1960-1994, John C. Corrough, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A.

Klancnik, ed., 1994), p39-48. Exemplary Plans of a Fisharina in Japan, Takeshi Kawagu-chi, Hideki Hata and Yasuhiro Yoshizuka, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p211-221.

Federal Permits for Marina Development: Controlling the Process, Johnine J. Brown, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A.

Klancnik, ed., 1994), p144-153.

Fisharina Policies in Japan, Noboru Oshima, Sanji Kida, Motobumi Manabe and Nobuo Mikami, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p201-210.

Harbor and Marina Improvements McKinley Marina Mil-waukee, Wisconsin, Greg High and Dave Werren, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p489-498.

Harborside International Golf and Marina Facility, Frank L. Kudma, Jr. and Richard P. Nugent, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p124-131.

Marina Ashdod, Israel - An Investor's Turn-Key Project Design, Rami Raviv, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p244-247.

Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994, 0-7844-0028-8, 620pp.

Marine Recreation Project of the City of Yokohama - Marine Park and Hakkei Island -, Tohru Yano, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p577-586.

Market Analysis of Marinas and Market Potentials in Asian Regions, Ronald E. Schults, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A.

Klancnik, ed., 1994), p238-243.

New Design and Construction of Marinas in Israel, Rami Raviv, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p562-564.

New Guidelines for Southern Pine Uses in Coastal Marine Construction, Jon Guerry Taylor, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p480-488.

New Problems in Ground & Water Lease Administration,

Allan D. Kotin and Faith F. Backus, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and

Fred A. Klancnik, ed., 1994), p154-161.
P3 for Marinas, Parks & Recreation, Richard Milbrodt, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p180-186. Planning and Improvement of Coastal Area Utilization, Masatsugu Fukuya, Junji Tanaka, Shigeki Nakamura, Toshiya Taneichi and Hideyuki Kida, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p222-231.

Retrofit Racks for Revenues, Patrick Farrell, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p499-505.

Simulation Modeling Drystack Marina Facilities, Jeffrey G. Shelden and Kerry Simpson, (Marinas, Parks and Rec-reation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p587-596.

Software for marina anchoring design on chains or cables, Gilles Collin, (Marinas, Parks and Recreation Develop ments, Marshall Flug, ed. and Fred A. Klancnik, ed.,

1994), p398-405.

Specifying and Attaining Acceptable Marina Tranquility, Jack C. Cox, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p470-479.

A Suggested International Classification of Marinas, Jon Guerry Taylor, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p140-143.

Two Case Studies of Marine Parks & Marinas as Economic and Tourism Activity Stimulators in Brazil, Claudio Brasil do Amaral and John C. Corrough, (), p565-576.

Use of a Modified Hybrid Model to Analyze the Effectiveness of Jetties in Reducing Marina Sedimentation, S. Jarrell Smith and E. J. Hayter, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p543-547.

The Value of Illusion vs. the Illusion of Value - The Full Range of Recreational Amenities that are Needed for the Marina of Today and Tomorrow, Daniel S. Natchez, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p232-237.

Visitor Usage Analysis as Basis for Marina Expansion, William E. McCleish and John C. Corrough, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p597-604.

The Waterfront Development Process, Jeffrey A. Bartoszek and Ronald E. Schults, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p93-103.

Waterfront Renaissance Racine, Wisconsin, Thomas N. Wright, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p544-551.

Waterfronts: GATEWAY to Your Community, Allyson Porsythe-Fiene, Robert D. Espeseth and Joseph T. O'Leary, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p449-459.

"A Comparison of Characteristics and Economic Expenditures of Boat Show Patrons At Two Types of Boat Shows", Mary H. Bielen, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p248-256.

Marine animals

Restoring and Protecting Marine Habitat, Thomas A. Sands and Wayne Young, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p368-377.

Influence of Flexible Mat on Settlements of Marine Clay, A. M. Deshmukh and V. T. Ganpule, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994),

Lateral Foundation Deformations for a Marine Test Fill, Demetrious C. Koutsoftas, (Vertical and Horizontal De formations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1111-1123.

Settlement of Test Fills for Chek Lap Kok Airport, Dominic O. Kwan Lo and Gholamreza Mesri, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1082-1099.

Marine engineering

Glossary of Marine Fiber Rope Terms, Task Committee on Marine Fiber Rope of the Waterways, Port Coastal and Ocean Division of ASCE, (Bill Remley, chmn.), 1993, 0-87262-896-5, 80pp.

Marine plants

Restoring and Protecting Marine Habitat, Thomas A. Sands and Wayne Young, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p368-377.

Marine terminals

Port of Tacoma Milwaukee Waterway Nearshore Fill Design, John R. Verduin, Doug Saathoff and Garry E. Hor-vitz, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1388-1399

Wando Terminal Ground Improvement Program, James Drew Hussin and Forrest Foshee, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1416-1425.

Market research

Differentiating the Experience of Boater "Publics", Ellen B. Drogin, Andrew Holdnak, Alan R. Graefe and James M. Falk, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p132-139

Market Analysis of Marinas and Market Potentials in Asian Regions, Ronald E. Schults, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A.

Klancnik, ed., 1994), p238-243.

Market Models, Protest Bids, and Outliers in Contingent Valuation, Greg Lindsey, WR Jan./Feb. 94, p121-129.

Adding Spice to Marketing Materials, ME May/June 94, pl.

Escaping the Niche, Shawn R. T. Severn and Corinne G. Severn, CE Oct. 94, p67-68.

International Expansion, Ethics, and Prohibited Foreign Trade Practices, A. L. Barco, ME Sept./Oct. 94, p34-40. Let's Go to the Videotape, Paul Tarricone, CE June 94, p42-45.

Making the Most of Marketing, William F. Peck, ME Nov./Dec. 94, p17-21.

Market Analysis of Marinas and Market Potentials in Asian Regions, Ronald E. Schults, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p238-243. Marketing Professional Services in Asia, Shawn R. T. Sev-

ern and K. V. Lew, ME Sept./Oct. 94, p24-26

Marketing Sould Be Tasteful, Not Tacky, ME July/Aug. 94, p10.

Multimedia in Civil Engineering, Jorge A. Vanegas and Nelson C. Baker, CE May 94, p71-73.

Seminars: A Tool for Marketing Professional Services, Scott C. Gladden, Karen S. Nakhjiri and Shawn R. T.

Severn, ME Jan./Feb. 94, p14-18.

Space Commercialization: Problems of Law and Policy, Glenn H. Reynolds, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and

Stanley Lokaj, ed., 1994), p1462-1470.

Technology Development and Transfer in Environmental Management, Jonathan Katz, Alan Karnovitz and Martin Yarbrough, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p314-7-314-12.

Using Marketing Techniques in Your Job Search Can

Yield Good Results, NE Feb. 94, p11.

"A Comparison of Characteristics and Economic Expenditures of Boat Show Patrons At Two Types of Boat Shows", Mary H. Bielen, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p248-256.

Markov chains

Probabilistic Behavior of Pavements, Kelvin C. P. Wang, John Zaniewski and George Way, TE May/June 94, p358-375.

Probabilistic Characterization of Droughts, G. V. Loganathan, S. Mostaghimi, V. K. Lohani and M. K. Tchaou, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p197-200.

Markov process

Markovian Models for Bridge Maintenance Management, William T. Scherer and Douglas M. Glagola, TE Jan./ Feb. 94, p37-51.

Developing Design Parameters for Constructing Ecologi-cally Functional Marshes Using Dredged Material in Galveston Bay, Texas, Lawrence P. Rozas and Roger J. Zimmerman, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p810-822.

Development of an Excavation Plan for Heavy Metal Con-Marsh Deposits, John J. Nocera and Thomas M. Simmons, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1220-1229.

Habitat Considerations: Galveston Bay Demonstration Marsh, Andrew V. Sipocz, (Dredging '94, E. Clark

McNair, Jr., ed., 1994), p823-827

Plans, Design, and Construction of a 100-Hectare Intertidal Demonstration Marsh Using Large-Scale Cutter Head Dredging Equipment in Galveston Bay, Texas, Keith P. Kindle, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p833-842

Planting of Large-Scale Marsh Projects, Eddie Seidenstick-er, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p828-832.

Maryland

The Bladensbug Marina Revitalization Project, Wesley R. Johnson and Kevin H. Deis, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p439-448.

Geogrids Help Solve Capitol's Gridlock, CE Dec. 94, p84.

Start-ups, CE Sept. 94, p8.

Masonry

Accurate Estimation of Interface Shear Stresses in Composite Masonry Walls, Subhash C. Anand and M. Ayubur Rahman, ST Mar. 94, p998-1015

Analytical Approach to Collapse Mechanisms of Circular Masonry Arch, Carlo Blasi and Paolo Foraboschi, ST Aug. 94, p2288-2309.

An Assessment of the Joint Factor as Used in the Modified MEXE Method, N. G. Gong and B. S. Choo, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p704-711.

Compressive Strength of Masonry Prisms, Magdi A. Khalifa and Ahmed E. Magzoub, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1100-1105.

Computer-Assisted Design of Hollow Concrete Masonry Bearing Walls, Kathleen M. Bradley and Terence A Weigel, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1703-1710.

Damage Tolerance Analysis in Structural Rehabilitation, Charles J. Hookham, (Analysis and Computation, Frank-

lin Y. Cheng, ed., 1994), p94-103.

Experimental Evaluation and Finite Element Analysis of Masonry-Infilled R/C Frames, P. B. Shing, A. B. Mehra-bi, M. Schuller and J. L. Noland, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p84-93.

Gothic Structure and Design: Narbonne Cathedral, Vivian Paul and Robert Warden, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1568.

Interface Model Applied to Fracture of Masonry Struc-tures, Hamid R. Lotfi and P. Benson Shing, ST Jan. 94, p63-80.

Lateral Response of Unreinforced Masonry Infill Frame Panels, James A. Hill, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p77-83.

Limit States Analysis of Masonry Arches, Thomas E. Boothby, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p797-802. Masonry Carries the Load, Daniel P. Abrams, CE Feb. 93, p66-67.

A Peice-wise Linear Evaluation of Masonry Infills Subjected to Out-of-plane Seiesmic Drift, R. Craig Henderson, W. Dale Jones, E. G. Burdette and Max L. Porter, (Struc tures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p803-808.

Performance of Commercial Masonry Structures in Hurri-cane Andrew, Geoffrey W. Blaney, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p456-464.

Seismic Behavior of Plain- and Reinforced-Masonry Buildings, Miha Tomaževič and Polona Weiss, ST Feb. 94, p323-338.

Seismic Response of Full-Scale Five-Story Reinforced-Masonry Building, F. Seible, M. J. N. Priestley, G. R. Kingsley and A. G. Kürkchübasche, ST Mar. 94, p925-

Seismic Strengthening of URM Buildings with Steel Brac-ing, Durgesh C. Rai, Subhash C. Goel and William T. Holmes, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p809-814.

Simulated Seismic-Load Tests on Full-Scale Five-Story Masonry Building, F. Seible, G. A. Hegemier, A. Igarashi and G. R. Kingsley, ST Mar. 94, p903-924.

Stability of Masonry Piers and Arches Including Sliding, Thomas E. Boothby, EM Feb. 94, p304-319.

State-of-the-Art Report on Seismic Performance of Unrein-forced Masonry Buildings, Michel Bruneau, ST Jan. 94, p230-251.

The Structural History of the Jacob Bachmann Tavern, Jack R. Kayser and Kristina Lammi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1570.

Structural Reliability Analysis of Masonry Shear Walls, George T. Zorapapel, Gary C. Hart and Dan M. Frango-pol, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p205-210.

Testing of Hollow Clay Tile Masonry Prisms, W. D. Jones and M. B. Butala, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1094-1099.

Uniform Lateral Load Capacity of Infilled Frames, Roger D. Flanagan and Richard M. Bennett, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p785-790.

Lumped Mass Modelling for the Dynamic Analysis of Air-craft Structures, Elias G. Abu-Saba, Ji-Yao Shen and William M. McGinley, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p124-134.

Nonlinear Response of Torsionally Coupled Base Isolated Structure, R. S. Jangid and T. K. Datta, ST Jan. 94, p1-

Mass transfer

Analysis of Biomass Distribution and Chemical Interactions in Nitrifying Biofilms, Edna M. C. V. Flora, Joseph R. V. Flora, Makram T. Suidan and Byung J. Kim, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p305-312

Change in Gasoline Constituent Mass Transfer During Soil Venting, Nancy J. Hayden, Thomas C. Voice, Michael D. Annable and Roger B. Wallace, EE Nov./Dec. 94, p1598-1614.

Computer Aided Design of Trickling Filters, Bruce E. Logan, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p678-685.

Computer simulation of pulsed pumping for remediation nder mass transfer limited conditions, Z. Jiang and W. P. Ball, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p352-359.

A Coupled Mass Transfer and Surface Complexation
Model for Uranium (VI) Removal from Wastewaters, John Lenhart, Linda A. Figueroa and Bruce D. Honeyman, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p249-256.

Effect of Roughness and Thickness of Biofilms on External Mass Transfer Resistance, Tian C. Zhang, Paul L. Bish-op and James T. Gibbs, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p593-600. Modeling Full-Scale Diffused Aeration Systems, Terry L. Johnson and Ross E. McKinney, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p702-709.

Modeling of Biofiltration of Natural Organic Matter in Summers, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p452-459.

Modeling of Dissolved Ozone Concentration Profiles i Bubble Columns, Hongde Zhou, Daniel W. Smith and S. J. Stanley, EE July/Aug. 94, p821-840.

Moisture and Heat Flow in Concrete Walls Exposed to Fire, Jana Selih, Antonio C. M. Sousa and Theodore W.

Bremner, EM Oct. 94, p2028-2043.

Pressure-Driven Gas Flow in Heated, Partially-Saturated Porous Media, Franklin T. Dodge and Ronald T. Green, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2217-2227.

Quantification of the Mechanisms Controlling the Removal Rate of Volatile Contaminants by Air Sparging, Gretchen L. Hein, Neil J. Hutzler and John S. Gierke, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p556-563.

Volatilization of Selected Organic Compounds from Quiescent Water, Jian Peng, Jatinder K. Bewtra and Nihar Biswas, EE May/June 94, p662-669.

Computation of Transverse Mixing In Streams, Alexander C. Demetracopoulos, EE May/June 94, p699-706.

Conservative Characteristics-Based Schemes for Mass Transport, C. W. Li and T. S. Yu, HY Sept. 94, p1089-

Coupled Mass-Transport and Chemical-Equilibrium Modelling of Bronze Disease, M. B. McNeil and J. C. Walton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

High-Resolution Upwind Schemes for Solving Mass Transport Equation, Jihn-Sung Lai, Hsieh Wen Shen and Dihua Zhao, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p497-

Non-Point-Source Pollution from Interrill Flow Areas, A. Parr, S. Limback, B. McEnroe and S. Zou, IR Nov./Dec. 94, p1056-1066.

A Real-Time Graphical Interface to a Two-Dimensional Groundwater Flow and Mass Transport Model, Robert C. Speake, Jr. and Kay S. Capps, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2081-

Contractor Must Notify Supplier or Get the Goods, CE June 94, p30.

Modeling the Seasonal Circulation in Massachusetts Bay, Richard P. Signell, Harry L. Jenter and Alan F. Blum-berg, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p578-

New Bedford Harbor, Massachusetts Dredging/Disposal of PCB Contaminated Sediments, Mark J. Otis, (*Dredging* '94, E. Clark McNair, Jr., ed., 1994), p579-587.

Rating the Megaprojects, CE Jan. 94, p8.

Spoils of War, Richard S. Skryness, Karl Swenson and Williams Pananos, CE Nov. 94, p51-53.

The Squantum Point Personnel Ferry and Metropolitan District Park, Quincy, Massachusetts, Patricia S. Loheed, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p370-376.

Start-ups, CE Aug. 94, p8.

Start-ups, CE Oct. 94, p8.

Start-ups, CE Dec. 94, p8. Subcontractor Must Uphold Indemnification Promise, CE Mar. 94, p27.

Mat foundation design

Mat Foundation Design: An Historical Perspective, Edward J. Ulrich, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed.

and Guy Y. Félio, ed., 1994), p107-120.

Performance of Oil Storage Tanks on Vibroflotation Improved Hydraulic Fill in the Port of Tampa, Florida, Fin tan J. Buggy, Ramon E. Martinez, James D. Hussin and Richard J. Deschamps, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p548-560.

Settlement of Large Mat on Deep Compressible Soil, James P. Stewart, Hugh S. Lacy and Charles C. Ladd, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed.,

1994), p842-859.

Mat foundations

Influence of Flexible Mat on Settlements of Marine Clay, A. M. Deshmukh and V. T. Ganpule, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994),

Settlement Analysis for 450 Meter Tall KLCC Towers, Clyde N. Baker, Jr., Ir. Tarique Azam and Len S. Joseph, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y.

Félio, ed., 1994), p1650-1671.

Applying Dredged Material to Recreation Area Development, Russell K. Tillman and Thomas R. Patin, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p271-282.

Bouncy Turf Tested in Soccer Field, CE Nov. 94, p86.

Changes in Los Angeles Code May Protect Wood Structures (ltr), CE Nov. 94, p32.

Covering Keeps Issue in Hand (ltr), CE June 94, p36.

Dual Purpose Pipeline in the 1900s Environment, Randall . Hill and Javier Saunders, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p119-128.

Human Extender: A Material Handling System, H. Kaz-A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p37-43.

Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994, 0-7844-0063-6, 1252pp.

MoveCapPlan: In Integrated System for Planning and Con-trolling Construction Material Laydown and Handling, I. D. Tommelein, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1172-1179.

New Kinematic Hardening Model, Wei Jiang, EM Oct. 94,

p2201-2222

Optical Waveguide Solar Energy System for Lunar Material Processing, Takashi Nakamura, Constance L. Senior, James M. Shoji and Robert D. Waldron, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1266-1277

Polystyrene Blocks Support Sinking Roadway, CE Oct. 94,

Processing of Lunar Materials, W. Howard Poisl and B. D. Fabes, AS July 94, p263-275.

Rehabilitation of Brick-Lined Railroad Tunnels to Achieve Increased Clearance, Bernard H. Voor, III, James Wm. Martin and Willie Benton, III, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p781-787.

Repair of Abrasion/Erosion Damage to Vallecito Dam with splica Fune Concrete, Stan Mattingly and Glenn Smoak, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p735-742.

Study: Thin Steel Edges Thick Wood, CE Nov. 94, p8. Waste Package Materials Selection Process, Ajit K. Roy, Robert L. Fish and R. D. McCright, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p993-999.

Materials engineering

Intelligent Renewal Keeps Infrastructure Civil, CE Mar.

Predicting Paint's Service Life, ET Aug./Sept. 94, p10.

Processing of Lunar Materials, W. Howard Poisl and B. D. Fabes, AS July 94, p263-275.

Materials failure

Dynamic Stress Intensity Factor for Subsurface Inclined Cracks, Chien-Ching Ma and Szu-Kuzi Chen, EM Mar. 94, p483-498.

Materials testing

Comparison of Nuclear and Core Pavement Density Measurements, Steve R. Sanders, Debasis Rath and Frazier Parker, Jr., TE Nov./Dec. 94, p953-966

Compression Strength of Pultruded FRP Materials, Ever J. Barbero and John Tomblin, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p836-843.

Cyclic Testing of Pultruded Fiber-Reinforced Plastic Beam-Column Rigid Connection, Michel Bruneau and

David Walker, ST Sept. 94, p2637-2652.

Edge Strength of Window Glass by Mechanical Test, Chris P. Pantelides, Gregory P. Sallee and Joseph E. Minor, EM May 94, p1076-1090.

Effect of Testing Variability on Contractor Payment for Asphalt Pavements, Serji N. Amirkhanian, James L. Burati, Jr. and Harish C. Mirchandani, CO Sept. 94,

Evaluation of Commercial Wood-Cement Composites for Sandwich-Panel Facing, Gebran N. Karam and Lorna J.

Gibson, MT Feb. 94, p100-116.

High- and Ultrahigh-Performance Concretes Are Ready to Rehearse, ET Apr./May 94, p1,4-5.

Impact of Weight Falling onto the Ground, Jose M. Roesset, Eduardo Kausel, Vicente Cuellar, Jose L. Monte and Julian Valerio, GT Aug. 94, p1394-1412.

Implementation of a Viscoplastic, Kinematic Hardening Constitutive Model for Impact Prediction, Jeffrey R. Sachs, Charles S. White and Frederick C. Taverner, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p388-401.

Influence of Specimen Size on Effect of Curing Regime on Concrete Compressive Strength, I. Soroka and H. Baum,

MT Feb. 94, p15-22.

Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994, 0-7844-0063-6, 1252pp.

Lunar Base Aspects for Biotechnology Industry, Judith Fielder and Nickolaus Leggett, (Engineering, Construc-tion, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1230-1236.

Reconstruction of the Dewey Square Tunnel, Brian Bren-ner, Dincer Akyali and Paul Moyer, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p772-780.

The Road is Tired, ET Apr./May 94, p11.

Selected Properties of High Performance Concrete, Erik J. Sellevold, Harald Justnes, Sverre Smeplass and Einar Aasved Hansen, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p562-609.

Tests for Biogenic Sulfuric Acid Corrosion in a Simulation Chamber Confirms the On Site Performance of Calcium Aluminate Based Concretes in Sewage Applications, Wolfgang Sand, Thierry Dumas, Serge Marcdargent, Albert Pugliese and Jean-Louis Cabiron, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p35-55.

Materials tests

Construction Materials, Once Tagged, Could Tell All, ET Oct./Nov. 94, p9.

Load Rate Effects on Concrete Compressive Strength, Joseph W. Tedesco, C. Allen Ross and Mary L. Hughes, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p245-251.

Study: Thin Steel Edges Thick Wood, CE Nov. 94, p8.

Materials, properties

Attempts to Introduce New Materials into Bridging, Edward Mark Lenoe, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p64-71. Cement and Concrete: Their Interrelation in Practice, Adam Neville, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p1-14.

Design, Not Material, Dictates Earthquake Survival (ltr),

CE Sept. 94, p36.

The Dredging Research Program Technical Area 2 Material Properties Related to Navigation and Dredging, Don Banks, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1554-1561.

Dynamic Linear Back Calculation of Pavement Material Parameters, Jacob Uzan, TE Jan./Feb. 94, p109-126.

Effect of Material Properties on Compactability and Bear-ing Capacity, Chris J. Semmelink and Alex T. Visser, TE

July/Aug. 94, p570-589.

Fluid Microconcrete - Properties and Application, M. Decter, D. Diamond, R. W. Lambe and D. Mueller, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p725-734

Impact of Weight Falling onto the Ground, Jose M. Roesset, Eduardo Kausel, Vicente Cuellar, Jose L.

Monte and Julian Valerio, GT Aug. 94, p1394-1412.

Innovative Civil Engineering Material from Sewage
Sludge: Biocement and Its Use As Blended Cement Material, Joo-Hwa Tay and Kuan-Yeow Show, MT Feb. 94, p23-33.

Lightweight Concrete - A Proven Material for Two Millennia, Theodore W. Bremner, Thomas A. Holm and Valentina F. Stepanova, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p37-51.

New Directions for Cement-Based Materials, J. Francis Young, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994),

Processing of Lunar Materials, W. Howard Poisl and B. D.

Fabes, AS July 94, p263-275.

Rate Dependent Plasticity and Damage for Concrete, V. P. Panoskaltsis, J. Lubliner and P. J. M. Monteiro, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p27-

Selected Properties of High Performance Concrete, Erik J. Sellevold, Harald Justnes, Sverre Smeplass and Einar Aasved Hansen, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p562-609.

Silica Fume (Microsilica) Fundamentals for Use in Concrete, Mark D. Luther and Philip A. Smith, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p75-

Structures Congress XII, 2 vols., N. C. Baker, ed. and Barry J. Loodno, ed., 1994, 0-87262-952-X, 1635pp.

The Total System Approach to Efficient Pipeline Design, Randal W. Stuart, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p159-

Use of Gel-Permeation Chromatography in Predicting Properties of Asphalt, Norman W. Garrick, MT Aug. 94, p376-389.

Mathematical models

2D Finite Element Modelling of Flooding Due to River Bank Collapse, L. D'Alpaos, A. Defina and B. Matticchio, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p60-71.

Calibration of Poorly Identifiable Systems: Application to Activated Sludge Model, Marcos von Sperling, EE

May/June 94, p625-644.

Computing and Design in Structural Engineering A Practicing Engineer's Point of View, Richard A. Parmelee, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p369-376.

Contaminant Fate and Transport Model in Pool-and-Riffle Streams, II Won Sco, Dae Young Yu and Jae-Hyung Lee, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p165-169.

A Coupled GIS-Water Quality Modeling System, Chen-Yu Cheng, J. F. Atkinson and J. V. DePinto, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p247-251. Density-dependent Circulation in Desert-basin Aquifers with Isotropic Self-Similar Permeability Distributions, Gilberto E. Urroz and Daoqiong Yang, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p87-91.

Design Optimization of Coventry Municipal Solid Waste Incinerator, V. Nasserzadeh, J. Swithenbank, C. Schofield, D. W. Scott, A. Loader and A. Leonard, EE

Nov./Dec. 94, p1615-1629.

Design Strengths of Cold-Formed Channels in Bending and Torsion, K. T. Kavanagh and D. S. Ellifritt, ST May

94, p1599-1607.

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The Efficiency of Source Terms in Performance Assessments for Salt Repositories, Dieter Buhmann, Jürgen Brenner and Richard Storck, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

waste Management, High Level Kadioactive Waste Program Committee, 1994), p501-507.
Freshwater-Inflow Need of Estuary Computed by Texasterine MP Model, Junji Matsumoto, Gary Powell and David Brock, WR Sept_/Oct. 94, p693-714.
Guardrail in Postensioned Timber-Bridge Specimen, Richard M. Gutkowski, Patrick J. Pellicane and Jean-Francois Kalin, ST Dec. 94, p3435-3455.

Improving the Pipeline Hydrostatic Leak Test Model, Rod-ney F. Wedge, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p182-205.

Learning Curve Predictors for Construction Field Operations, John G. Everett and Sherif Farghal, CO Sept. 94,

Mathematical Modeling of Saturated-Unsaturated Flow to Drains, Saleem Ahmad, Deepak Kashyap and B. S. Mathur, IR Jan./Feb. 93, p18-33. Mathematical Models to Assess Stream Dynamics, Laura Bittner, Yarko Niño and Marcelo García, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p391-395.

Mechanics of Growing Deformable Solids: A Review,

Vyacheslav E. Naumov, EM Feb. 94, p207-220. Modeling Horizontal Round Buoyant Jets in Shallow Water, A. J. Johnston, C. R. Phillips and R. E. Volker, Hydan, 94, p41-59.

Modeling of Dissolved Ozone Concentration Profiles in

Bubble Columns, Hongde Zhou, Daniel W. Smith and S. J. Stanley, EE July/Aug. 94, p821-840.

Modeling of Infiltration from Trenches for Storm-Water Control, Michael Duchene, Edward A. McBean and Neil

R. Thomson, WR May/June 94, p276-293. Modeling Temperature Impacts on Salmon Survival, Jamie D. Anderson and Gerald T. Orlob, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p323-326.

Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994, 0-

7844-0035-0, 375pp.
Object-oriented Model of Colorado River Salinity, Nancy E. Winter and Steven C. Chapra, (Water Policy and Management: Solving the Problems, Darrell G. Fontane,

Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), 392-395.
Optimal Operation of Soil Aquifer Treatment System, Zongwu Tang and Larry W. Mays, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p441-444.

Optimization Analysis of Deficit Irrigation Systems, Francesco Mannocchi and Pompeo Mecarelli, IR May/June

94, p484-503.

94, p484-503.
Predicting Sediment Yield in Storm-Water Runoff from Urban Areas, Thomas W. Haster and Wesley P. James, WR Sept./Oct. 94, p530-650.
Prediction of Low Level Vibration Induced Settlement, Dong-Soo Kim, Sergey Drabkin, Anatoly Rokhvarger and Debra Laefer, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p806-817.
Research on the Consolidation of Mud, Erik Toorman and Marc Sas, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p430-439.

1994), p430-439.

Saturation and Gas Migration Within Clay Buffers, Peter Grindrod, Michael Impey, Syra Saddique and Hiroyasu Takase, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2069-2075.

- Sediment Transport Measurements in Combined Wave-Current Flows, I. Katopodi, J. S. Ribberink, P. Ruol and C. Lodahl, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p837-851.
- Selection of Gravel-Transport Formula for Stream Modeling, Howard H. Chang, HY May 94, p646-651.
- Simulation of Round Buoyant Jet in Stratified Flowing Environment, G. A. Bemporad, HY May 94, p529-543.
- Simultaneous Routing and Siting for Hazardous-Waste Operations, Timothy L. Jacobs and John M. Warmerdam, UP Sept. 94, p115-131.
- Small Scale Dynamic Structures and Their Sedimentation Effects in Estuarine Environment, Chaoyu Wu and Jiaxue Wu, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p158-174.
- Some Applications of Neural Networks in Structural Engineering, Jamshid Ghaboussi, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p25-36.
- Stability Theory of Cohesive Crack Model, Yuan N. Li and Robert Y. Liang, EM Mar. 92, p587-603.
- A Study on Mathematical Model for Sediment Yield in Mountain Regions with Large Hillside Slopes, Duo Fang and Guoliang Yu, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p752-756.
- Two-Dimensional Dam-Break Flow Simulation in a Sudden Enlargement, M. Četina and R. Rajar, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p268-282.
- Volatilization of Selected Organic Compounds from Quiescent Water, Jian Peng, Jatinder K. Bewtra and Nihar Biswas, EE May/June 94, p662-669.
- A Watershed Model for Estimating Suspended Sediment Hydrographs, Hafez Q. Shaheen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1176-1180.

Mathematical programming

How to Optimize Light-Gage, Cold-Formed Steel Beams, Scott A. Burns, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p104-112.

Mathematic

- Application of Structural Optimization, M. Z. Cohn and A. S. Dinovitzer, ST Feb. 94, p617-650.
- Automated Surface Wave Method: Inversion Technique, Deren Yuan and Soheil Nazarian, GT July 93, p1112-1126.
- Horton Infiltration Equation Revisited, A. Osman Akan, IR Sept./Oct. 92, p828-830.
- Metrication: A Negative Net Benefit? (ltr), CE Nov. 94, p29.
- Significance of Averaging Coefficients in Open-Channel Flow Equations, Renjie Xia and Ben Chie Yen, HY Feb. 94, p169-190.
- Using Cavity Well to Determine Aquifer Thickness and Constants, Mohammad Saleem, IR May/June 94, p504-519.

Matrices, mathematics

Wastewater Treatment Optimization Model for Developing World II: Model Testing, S. L. Tang and K. V. Ellis, EE May/June 94, p610-624.

Matrix methods

- Dynamic Analysis of a High Speed Transport Model by Using a Piecewise Continuous Timoshenko Beam Model, Ji Yao Shen and William M. McGinley, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p27-36.
- Elastic Critical Loads for Plane Frames by Transfer Matrix Method, Stavros Syngellakis and Esmat S. Kameshki, ST Apr. 94, p1140-1157.
- Quality-Measurement Matrix, James D. Stevens, Charles Glagola and William B. Ledbetter, ME Nov/Dec. 94, p30-35.

Maximum load

- Acoustic Emission Testing of Fiberglass Molded Grating, Kenneth Berg and J. Frank Mayfield, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p131-138.
- An Application of Inverse Problem Techniques to Spatial Structures, Pei Shan Chen, Mamoru Kawaguchi and Masaru Abe, (Spatial, Lattice and Tension Structures, John F, Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p113-122.
- Modeling of Extreme Loading by 'Peaks Over Threshold' Methods, J. L. Gross, N. A. Heckert, J. A. Lechner and E. Simiu, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p135-147

Maximum probable flood

Probable Maximum Flood Estimation for New and Existing Dams, Anand Prakash, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p361-365.

McCasland, Stanford P.

McCasland Noted Hydraulic Engineer, Dies at 88, CE Sept. 94, p79.

McGuire, William

- ASCE Elevates 13 of Its Own to Honorary Membership, NE May 94, p3.
- Atlanta Ceremony Celebrates 13 New Honorary Members of ASCE, NE Dec. 94, p2-3.

Meandering streams

- Evaluation of Methods for Predicting Bend Loss in Meandering Channels, C. S. James, HY Feb. 94, p245-253.
- Mathematical Models to Assess Stream Dynamics, Laura Bittner, Yarko Niño and Marcelo García, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p391-395.
- The Miller City Levee Break and Incipient Meander Cutoff, K. A. Oberg and R. B. Jacobson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p623-627.

Measurement

- Anomalous Measurements in a Compound Duct, David G. Rhodes and Donald W. Knight, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p311-320.
- Bridge Scour Instrumentation, P. F. Lagasse, E. V. Richardson and S. A. Sabol, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p36-40.
- Brief Summary of National Bridge Scour Data Base, Mark N. Landers, J. Sterling Jones and Roy E. Trent, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p41-45.
- Clients Do Not Use Metrics, CE Jan. 94, p30.
- Coherent Structures in Compound Open-Channel Flows by Making Use of Particle-Tracking Visualization Technique, Iehisa Nezu, Hiroji Nakagawa and Ken-ichi Saeki, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p406-415.
- Consideration of Calculated and Measured Weld Metal Cooling Rates for Welding High Strength Steels, Joseph M. Blackburn and Gene L. Franke, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1225-1232.
- Controlled Dynamic Cracking of High-Strength Concrete Specimens, David Z. Yankelevsky and Itzhak Avnon, MT Nov. 94, p564-577.
- Crest-Breaking Time-Lapse Approach for Measuring Breaker Angle, P. Chandramohan, B. U. Nayak and N. M. Anand, WW May/June 94, p318-324.
- Developing Air Concentration and Velocity Probes for Measuring Highly-Aerated, High-Velocity Flow, Kathleen H. Frizell, David G. Ehler and Brent W. Mefford, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p.268-277.

Electrical Properties of Topopah Spring Tuff as a Function of Saturation, Jeffery J. Roberts and Wunan Lin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2112-

Estimating Laboratory Wave Reflection Using Laser Doppler, Steven A. Hughes, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p918-933

Estimation of Mean Flow Velocity in Ice-Covered Channels, Martin J. Teal, Robert Ettema and John F. Walker,

HY Dec. 94, p1385-1400.

Estimation of Mean Velocity for Flow Under Ice Cover, Martin J. Teal and Robert Ettema, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p242-250. Evaluation of the Return Period of the September 1992

valuation of the Return Feriod of the September 1992
Flood in Genova, Italy, Paolo Bartolini and Juan B.
Valdés, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel,

ed., 1994), p102-106.

Experimental Design and Measurement Techniques for Investigation of Two-Phase Flow, Andreas J. Kuck, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p86-93.

Experimental Study of Embedded Fiber-Optic Strain Gauges in Concrete Structures, S. F. Masri, M. S. Agba-bian, A. M. Abdel-Ghaffar, M. Higazy, R. O. Claus and M. J. de Vries, EM Aug. 94, p1696-1717. Field Experiments for Wind Effects on Low Buildings, Wichow. C. Mehte. Dougles A. Smith and Byron B.

Kishor C. Mehta, Douglas A. Smith and Byron B. Yeatts, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1451-1456.

Field Test of Buried Ocean-Wave Directional Spectrometer System, Tom Nye and Tokuo Yamamoto, WW Sept./

Oct. 94, p451-467.

Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994, 0-7844-0036-9, 546pp.

High-Resolution Measurements of Sand Suspension by Plunging Breakers in a Large Wave Channel, William R. Dally and Stephen F. Barkaszi, Jr., (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p263-277. Hot-Film Response in Three-Dimensional Highly Turbu-

lent Flows, P. Prinos, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p176-184.

Implementing a National Wave Monitoring Network— Some Lessons and Plans, David D. McGehee and J. Michael Hemsley, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p208-222.

In-Situ Measurements of Dynamic Soil Properties and Liq-uefaction Resistances of Gravelly Soils at Keenleyside Dam, Ken K. Y. Lum and Li Yan, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p221-240.

Industrial Facility Quality Perspectives in Owner Organizations, Kelly Jean Fergusson and Paul Teicholz, CF May

194, p89-109.

LDV System for Towing Tank Applications, R. N. Parthasarathy and F. Stern, (Fundamentals and Advantage of the tation, Clifford A. Pugh, ed., 1994), p386-395.

Low-Cost Bridge Scour Measurements, J. D. Schall, J. R. Richardson and G. R. Price, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p114-118

Measurement and Hindcast of Hurricane Iniki Coastal Inundation, Steven Yamamoto, Scott Sullivan and Eiji Nakazaki, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p756-771.

Measurement and Prediction of Surface Shear Stress in An-

nular Flume, D. I. Graham, P. W. James, T. E. R. Jones, J. M. Davies and E. A. Delo, HY Sept. 92, p1270-1286.

Measurement of Phase Compositions in Portland Cement Clinkers, F. Sorrentino, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p1-14.

Measurement of Turbulent Properties in a Natural System, Jörg Imberger and Roger Head, (Fundamentals and Ad-vancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p1-20.

Measurements of the Hydrodynamic Lift and Drag Forces Acting on Riprap Side Slope, A. F. Ahmed and F. S. El-Gamal, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p331-340.

Measuring Water in Trapezoidal Canals, Zohrab Samani and Henry Magallanez, IR Jan./Feb. 93, p181-186.

Monitoring Stay Cable Forces During Construction of the Natchez Trace Parkway Arch Bridge, Allan Brayley, Brett Commander and Jeff Schulz, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p278-283.

A New Basic Principle for a New Series of Hydraulic Measurements. Erosion by Abrasion, Corrosion, Cavitation and Sediment Concentration, Lucien Chincholle, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p301-310.

A New Formula for Mean Velocity in Torrents, Hanspeter ing '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p667-671. Hodel and Isidor Storchenegger, (Hydraulic Engineer-

384

On Measurements of Particle Spinning Motion, Hong Yuan Lee and In-Song Hsu, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p149-158.

Optical Methods for Sediment-Laden Flows, R. N. Parthasarathy and M. Muste, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p223-232.

ORP Measurement in Anaerobic Systems Using Flow-Through Cell, Munish Gupta, Ashutosh Gupta, Makram T. Suidan, Gregory D. Sayles and Joseph R. V. Flora, EE Nov./Dec. 94, p1639-1645.

Parameter Regionalization of a Daily Baseflow Runoff Model, Paolo Bartolini and Juan B. Valdés, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p97-101.

Quality-Measurement Matrix, James D. Stevens, Charles Glagola and William B. Ledbetter, ME Nov./Dec. 94, p30-35.

Radionuclide Release Rates From Natural Analogues of Spent Nuclear Fuel, D. B. Curtis, J. Fabryka-Martin, P. Dixon, R. Aguilar and J. Cramer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2228-2236. Residual Soil Settlment Related to the Weathering Profile,

George F. Sowers, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1689-1702. Sediment Measurement Instrumentation A Personal Perspective, E. V. Richardson, (Fundamentals and Ad-

vancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p94-103.

Standardizing Wind Measurements for Documentation of Surface Wind Fields in Hurricane Andrew, Mark D. Powell, Samuel H. Houston and Timothy A. Reinhold, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p52-69.

Static Pile Load-Movement From Dynamic Measurements, Frank Rausche, Mohamad Hussein, Garland Likins and Gabriel Thendean, (Vertical and Horizontal Deforma-tions of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p291-302.

Survey Distance Units: A Better Way, Larry E. Stanfel, SU

Aug. 94, p130-132.

Velocity and Turbulence Measurement from the Illinois and Mississippi Rivers, Ta Wei Soong and Nani G. Bhowmik, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p62-75.

Velocity Measurements by the "One-Orange Method", B. A. Christensen, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p76-85.

Void Fraction Measurement Techniques for Gas-Liquid Bubbly Flows in Closed Conduits; A Literature Review, Mahmood Naghash, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p278-288.

Measuring instruments

Comparison of Nuclear and Core Pavement Density Measurements, Steve R. Sanders, Debasis Rath and Frazier

Parker, Jr., TE Nov./Dec. 94, p953-966.

Design of an In-Situ Directional Wave Gage for One Year Deployments, Gary L. Howell, (Ocean Wave Measure-ment and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p264-276.

Eliminating Water Column Separation and Limiting Backspin at a 12,000-Horsepower Pumping Plant, Paul Otter, David Hoisington and David Raffel, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p435-444.

Impact Echo in the Thick of Pavement Construction, CE Dec. 94, p19,21.

Observations on the Growth of an Internal Boundary Layer with a Lidar Technique, Chia R. Chu, Marc Parlange, William Eichinger and Gabriel Katul, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p519-529.

Optical Remote Sensing of Wave Surface Kinematics, Stephen Riedl, Richard Seymour and Jun Zhang, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p943-950.

Shaft Performance in Taylor Marl-Field Measurements vs. Numerical Modeling, David B. Spires, Fei Duan and Marek Mrugala, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p779-784.

Mechanical engineering

Engineering, Construction, and Operations in Space IV, 2 vols, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994, 0-87262-937-6, 1560pp.

Mechanical properties

Advances in Strain-Hardening Cement Based Composites, Victor C. Li, (Advances in Cement and Concrete, Mi-chael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p235.

Cementing Action in Non-Portland Cement Systems: Sulpho-Pozzolanic and Silico-Pozzolanic Reactivity, R. T. Hemmings and E. E. Berry, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L.

Sarkar, ed., 1994), p329-336.

Development, Testing and Modeling of Ceramic Composites for Lunar Applications, János C. Tóth and Chandra S. Desai, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p358-367.

Fundamental Properties of Asphalt Rubber Blends, Wil-liam H. Daly, Louay N. Mohammad, Ioan Negulescu, Harold R. Paul and Jeffrey Youngblood, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham,

ed., 1994), p425-431.

Mechanical and Bulk Properties in Support of ESF Design Issues, R. H. Price, R. J. Martin, III, P. J. Boyd and J. S. Noel, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1987-1992.

Mechanical Properties of Kaolinite/Fiber Soil Composite, M. H. Maher and Y. C. Ho, GT Aug. 94, p1381-1393.

Mechanical Properties of Stone Mastic Asphalt, M. N. Partl, T. S. Vinson and R. G. Hicks, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p849-858.

Mechanical Properties of Very Early Strength Concretes, S. H. Ahmad and Paul Zia, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994),

p701-708

Mechanical Properties, Microstructure and Durability of Portland Cement-Based Systems Containing Micro-Reinforcement, Norman M. P. Low, I. Gagnon and J. J. Beaudoin, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p200-216.

Mechanics of Curved Fiber Bundles in Composites, David W. Jensen, Suresh P. Pai, Timothy R. Pickenheim and W. Jensen, Suresn F. Pal, Himomy K. Pickenneim and Colleen M. McCarty, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p276-286.Postbuckling of Moderately Thick Circular Plates With Edge Elastic Restraint, G. Venkateswara Rao, N. Ra-jasekhara Naidu and K. Kanaka Raju, EM Oct. 94,

p2232-2238.

Processing of Lunar Materials, W. Howard Poisl and B. D.

Fabes, AS July 94, p263-275.

A Simple Method of Producing Lunar Soil Simulants for Engineering Studies, Koon Meng Chua, Scott Pringle and Stewart W. Johnson, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p867-877 Small Diameter Fibers/Micro Fibers for Reinforcement of

Thin Sheet Products, Ziad Bayasi and Jack Zeng, (Infra-structure: New Materials and Methods of Repair, Kim

D. Basham, ed., 1994), p380-385. ne Testing of Thermal-Mechanical-Hydrological-Chemical Processes Using a Large Block, W. Lin, D. G. Wilder, J. A. Blink, S. C. Blair, T. A. Buscheck, D. A. Chesnut, W. E. Glassley, K. Lee and J. J. Roberts, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1938-1945

Mechanics

Application of OOP and GUI to the Development of Educational Software in Structural Mechanics, S. T. Mau and V. Aruna, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1273-1279.

Concurrent E-I Algorithm in Structural Dynamics, E. D. Sotelino, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p169-176.

Effects on River Mechanics Due to Reduction in Low-Season Discharge, E. V. Richardson, (Hydraulic Engi-neering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p115-119.

High-Resolution Upwind Schemes for Solving Mass Transport Equation, Jihn-Sung Lai, Hsieh Wen Shen and Dihua Zhao, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p497-

Practical Solution of the Flexibility to Stiffness Transformation Problem With a Mathematical Assistant for the Personal Computer, Thomas A. Lenox and Ronald W. Welch, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1465-1472.

Some Applications of Neural Networks in Structural Engineering, Jamshid Ghaboussi, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p25-36.

Variational Theories in Hydrodynamics and Hydraulics, Chih Ted Yang, HY June 94, p737-756.

Membrane reinforcement

Membrane Structures: Technological Innovation and Architectural Opportunity, Edmund Happold, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p547-

Architecture and Lightweight Structures: A Methodical Design Approach, Vinzenz Sedlak, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1010-1023.

Assessing the Reliability of Low Pressure Membrane Sys tems for Microbial Removal, Samer S. Adham and Joseph G. Jacangelo, (Critical Issues in Water and Waste water Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p313-319.

Chelating Composite Membrane: Its Application in Selec-tive Heavy-Metal Solid-Phase Separation, Sukalyan Sengupta and Arup K. Sengupta, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p265-272

Colloidal Fouling of Reverse Osmosis Membranes, Menachem Elimelech and Xiaohua Zhu, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p329-335.

Concrete Shells Today, Heinz Isler, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p820-836.

Cyclic Behavior of Gravelly Soil, Mark D. Evans and Shengping Zhou, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p158-176.

Damage Tolerance of Thin Composite Reinforced Membrane Structures, Levon Minnetyan, (Engineering, Con struction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p296-305.

DBP and Hardness Control by Membrane Filtration, Charles D. Turner and Srinivasa R. Kadubandi, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p344-351.

Denver International Airport Tensile Roof Case Study: The Fabrication and Construction Process, Martin L. Brown, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p969-978.

Direct and Modal Analyses for Shape-Finding of Unstable Structures, Tetsuyuki Tanami and Yasuhiko Hangai, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p714-723.

Experimental Study on the Strut Type of Cable Net Membrane Structures, Masao Saitoh, Akira Okada, Hiroaki Tabata and Toshio Mochizuki, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p573-582

Fabric Roof Design Responds to New Technologies, Craig G. Huntington, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U.

Penalba, ed., 1994), p674-683.

Fabric Structures for Public Buildings, Horst Berger, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p583-591.

Finite Element Modeling of Concrete Expansion and Confinement, F. J. Vecchio, ST Sept. 92, p2390-2406.

Flat Plates with Regular and Irregular Column Layouts.I: Analysis, Kolbjorn Saether, ST May 94, p1563-1579.

Flat Plates with Regular and Irregular Column Layouts.II: Numerical Evaluations, Kolbjorn Saether, ST May 94,

Fouling of Nanofiltration Membranes by Natural Organic Matter, Francis A. DiGiano, Anne Braghetta, James Nilson and Bruce Une, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p320-328.

A Generic Inflatable Structure for a Lunar/Martian Base, Willy Z. Sadeh and Marvin E. Criswell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1146-

Helium-Supported Hangar for a Small Solar-Powered Airship, Rosemarie Wagner and Bernd Kröplin, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994),

Immiscible Organic Liquid Recovery Using Unconfined Membranes, Leonard Jewell and Michael J. Semmens, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p90-

Influence of Membrane Forces on Transverse-Shear Reinforcement Design, Perry Adebar and Weishi He, ST Apr. 94, p1347-1366.

A Membrane Structure for a Lunar Assembly Building, Mark E. Schroeder and Philip J. Richter, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p186-195.

Moisture Migration through Basement Walls, Robert W. Day, CF Feb. 94, p82-86.

The Performance of Unconfined Hollow Fiber Membranes as Pipe Flow and Mixed Flow Aerators, Drew W. Johnson and Michael J. Semmens, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p106-113.

Pilot Test on Groundwater Organics Removal by Low-Pressure Membranes, Paul Fu, Hector Ruiz, Ken Thompson and Carl Spangenberg, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p336-343.

Removal of Arsenic by Enhanced Coagulation and Mem-brane Technology, S. David Chang, Hector Ruiz, Wil-liam D. Bellamy, Carl W. Spangenberg and Debra L. Clark, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed.,

1994), p632-639.

A Shape-Finding Finite Element Analysis for an Equally-Stressed Surface in Membrane Structures, T. J. Kwun, S. Y. Sur and H. W. Cho, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p724-731.

Solar Stretch, Jörg Schlaich, Rudolf Bergermann and Wolfgang Schiel, CE May 94, p47-50.

Study on Mechanical Characteristics of Light-weight Comlex Structure Composed of a Membrane and a Beam String Structure, Masao Saitoh, Akira Okada, Katsuo Maejima and Tetsuo Gohda, (Spatial, Lattice and Ten-sion Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p632-641.

Study on Structural Characteristics of Air-Inflated Beam Structures, Masaya Kawabata and Kazuo Ishii, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994),

p742-751.

Testing Methods for Roof Systems, Phillip J. Smith, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p340-349.

Treatment of Oil in Water Emulsions by Ceramic-Supported Polymeric Membranes, Robert P. Castro, Yoram Cohen and Harold G. Monbouquette, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p82-89.

Vibration Characteristics of Suspension Membrane Structures, Norio Masaoka, Kazuo Ishii and Ryo Muranaka, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed.,

1994), p732-741.

Wall Relief and Three Dimensional Suspension Sculpture Utilizing Tension and Membrane Structures, Warren Seelig, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p602-611.

Membranes, linings

Under Cover, Neno Duplancic, CE Dec. 94, p70-71.

Black & Veatch in Unique Overseas Partnership, CE Jan. 94, p12-13.

Consolidation in the Environmental Engineering Industry, Paul J. Zofnass, ME May/June 94, p13-17.

Mesh generation

Computation of a flood event using a two dimensional finite element model and its comparison to field data, P. D. Bates, M. G. Anderson and J.-M. Hervouet, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p243-256.

Mesh Generation for Estuarine Flow Modeling, Norman L. Jones and David R. Richards, WW Nov./Dec. 92, p599-

Metal finishing

Recovery of Chromium from Spent Plating Solutions by a Chromyl Chloride Process, Subbarao L. Guddati, Thomas M. Holsen and J. Robert Selman, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p241-248.

Comprehensive Fate Model for Metals in Municipal Wastewater Treatment, Wayne J. Parker, Hugh D. Monteith, John P. Bell, Henryk Melcer and P. Mac Berthouex, EE Sept./Oct. 94, p1266-1283.

Consideration of Calculated and Measured Weld Metal Cooling Rates for Welding High Strength Steels, Joseph M. Blackburn and Gene L. Franke, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1225-1232.

Design and Field Performance of a Metal-Plate-Connected Wood Truss Bridge, Michael H. Triche, Michael A. Riter, Stuart L. Lewis and Ronald W. Wolfe, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1310-1315.

Diaphragm Action of Cladding in Low-Rise Metal Build-ings, Bala Sockalingam, David Montgomery, Scott Schiff and Peter Sparks, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1048-1053.

Failures and Failure Mechanisms for Exterior Walls, Gene S. Sanders, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p509-518.

Patigue Crack Growth Rate of Metal by Plastic Energy Damage Accumulation Theory, Wei Wang and Cheng-Tzu Thomas Hsu, EM Apr. 94, p776-795.

Mechanical Behavior of Metal Contact Joint, Shigeru Kuranishi, Futamia Naganuma, Masatoshi Nakazawa and Tetsuo Iwakuma, ST July 94, p1977-1990.

Metal Truss Plates: Less than Full-Depth Penetration and Shear Buckling, Keith F. Faherty, Gerri L. Peot nee Kocher and Matthew J. Mazza, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994),

Reduction, Reuse, and Recycling on a Future Lunar Base, Sarah Soliz, Laura Symonds and Christine Willan, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994),

p804-810.

Solar Stretch, Jörg Schlaich, Rudolf Bergermann and Wolfgang Schiel, CE May 94, p47-50.

Successes and Failures of Metal Building Systems During Hurricane Andrew, Nanette Dean, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p465-471.

A Systems Approach to the Management of a Contaminated Metal Recycle Project, Layne Pincock and Steven Wahnachaffe, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1069-1073.

Meteorological data

Daily Procedure for GLFS Nowcasts, Chieh-Cheng J. Yen, John G. W. Kelley and Keith W. Bedford, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p202-206.

Estimation of Design Surge Heights by Utilizing Meteorologic and Oceanographic Data, Jahir Uddin Chowdhury and A. K. M. Tareque, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p918-922.

Meteorology

Empirical Guidance for Siting Berms to Promote Stability or Nourishment Benefits, Edward B. Hands and Donald T. Resio, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p220-228.

NDBC Wave Data-Current and Planned, K. E. Steele and Theodore Mettlach, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hems-

ley, ed., 1994), p198-207

New Program for the Marine Observation and Prediction Center of the Central Weather Bureau, Beng-chun Lee, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p124-134

The Re-derivation of the NDBC Wind-Wave Algorithm, Ian M. Palao and David B. Gilhousen, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p569-575.

Design and Construction of Shielded Lunar Outpost, S. D. Jolly, J. Happel and S. Sture, AS Oct. 94, p417-434.

Distributional Information for Ejection Fragments, Eric P. Steinberg, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p402-413.

Implications of Theories of Asteroid and Comet Impact for Policy Options for Management of Spent Nuclear Fuel and High-Level Radioactive Wastes, Newell J. Trask, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1324-1328.

The LEO Particulate Environment as Determined by LDEF, Thomas H. See, Michael E. Zolensky, Friedrich Hörz, Ronald P. Bernhard, Kimberly S. Leago, Jack L. Warren, Clyde A. Sapp, Tammy R. Foster and William H. Kinard, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p618-627.

Optical Scatter From a Space Craft Mirror Due to Microscopic Impacts, Lawrence B. Crowell, (Engineering Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p368-377. Overview of Space Environmental Effects, Alan J. Watts,

(Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed.,

1994), p628-637.

"Deepwater Waves and Tsunami Produced by the Impacts of Small Asteroids", J. G. Hills, (Engineering, Construc-tion, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1365-1371.

Buoyant Advection of Gases in Unsaturated Soil, Gregory E. Seely, Ronald W. Falta and James R. Hunt, EE Sept./ Oct. 94, p1230-1247.

Fluid Inclusion Studies of Calcite Veins from Yucca Mountain, Nevada, Tuffs: Environment of Formation, Edwin Roedder, Joseph F. Whelan and David T. Vaniman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1854-1860.

Landfill Leachate Treatment by Evaporation, Deborah R. Birchler, Mark W. Milke, A. Leigh Marks and Richard G. Luthy, EE Sept./Oct. 94, p1109-1131.

Model for Treatment of Trichloroethylene by Methano-trophic Biofilms, James E. Anderson and Perry L.

McCarty, EE Mar/Apr. 94, p379-400.

Shear Modulus of Kaolin Containing Methane Bubbles, S.
M. Duffy, S. J. Wheeler and J. D. Bennell, GT May 94, p781-796.

Methane generation

Pros and Cons of Developing Recreational Facilities on Closed Landfills, Michael S. Golden, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p257-260.

Methodology

At-Reactor Dry Storage Issues, Flora Emami, William Hollaway and Mark Fleming, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1152-1160. Bridge Fabrication Error Solution: Developing a Knowl-

edge-Based Expert System for a State Department of Transportation, W. M. Kim Roddis and Michael R. Hess, (Computing in Civil Engineering, Khalil Khozeimeh,

(Computing in Civil Engineering, 1994), p1687-1694.

Calibration of a Highway Traffic Assignment Model for the Manhattan Central Business District, V. Papayannoulis, J. C. Falcocchio and L. Maynus, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p720-

Comparative Analysis of Three Constructability Approaches, Jeffrey S. Russell, John G. Gugel and Michael W. Radtke, CO Mar. 94, p180-195.

Computer Automation and Project Organizational Impact: A Conceptual Model, Stuart Anderson and Suresh Ketha, (Computing in Civil Khozeimeh, ed., 1994), p498-501. in Civil Engineering,

Decision Analysis of Hanford Underground Storage Tank Waste Retrieval Systems, M. W. Merkhofer, D. A. Bitz, D. L. Berry and L. J. Jardine, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1739-1744.

Designing Optimal Reliable Multiquality Water Supply Systems, Avi Ostfeld and Uri Shamir, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p270-274.

Development of a Knowledge-Based System for Sanitary Landfill Design, H. Basri and E. I. Stentiford, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p1257-1264.

Doe's Topical Report on a Methodology to Assess Vibra-tory Ground Motion and Fault Displacement Hazards at the Yucca Mountain Site, David F. Fenster and Richard C. Quittmeyer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Commit-

tee, 1994), p2260-2265.

Effective Unsaturated Hydraulic Property Determination with the Renormalization Group Approach: Methodology, Sitakanta Mohanty and Amvrossios C. Bagtzoglou, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2660-2668.

Equivalent Differential Equations in Fixed-Grid Characteristics Method, Mohamed S. Ghidaoui and Bryan W. Kar-

ney, HY Oct. 94, p1159-1175.

Hot-Film Response in Three-Dimensional Highly Turbulent Flows, P. Prinos, (Fundamentals and Advancements Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p176-184.

Hurricane Iniki and Typhoon Omar Meteorology, Thomas A. Schroeder, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p84-91.

Instream Flow Studies: Susquehanna Basin and Pennsylvania, Donald R. Jackson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p145-148.

Issues and Experiences in Developing Shared Object Models, D. H. Douglas Phan and H. Craig Howard, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p584-591

LRFD vs. ASD for Wood Structures, David G. Pollock and Thomas G. Williamson, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p76-85.

Measurement of Phase Compositions in Portland Cement Clinkers, F. Sorrentino, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p1-14.

Methodology of Scientific Investigations for Radioactive Waste Disposal in Geological Formations of Ukraine, D. P. Khrushchov, O. M. Kharitonov and Eu. A. Yakovlev, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1514-1520.

Mitigation of Non-Point Source Pollution Impacts on Groundwater Aquifers: A Case Study, Erez Sela, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p246-

249

Multi-Reservoir Systems Optimization by the Aggrega-tion/Decomposition Methodology, M. Bessa, K. Pon-nambalam and A. Bogobowicz, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p192-196.

Multiobjective Optimization of Actively Controlled Structures, S. S. Rao, (Analysis and Computation, Franklin Y.

Cheng, ed., 1994), p276-285.

A Performance Goal-Based Seismic Design Philosophy for Waste Repository Facilities, Quazi A. Hossain, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2266-2271

Port of Sines West Breakwater Rehabilitation Repair Works (1990 - 1992), Carlo Alberto Segarelli, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994). p205-228.

Predictions of Shallow Foundation Behavior for Settlement '94, Storer J. Boone, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p168-172.

A Probabilistic Approach to Assessing Radioactive Waste Container Lifetimes, Fiona M. Porter, Chris C. Naish and Susan M. Sharland, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1008-1013.

Probabilistic Modeling of Scheduling Uncertainty: Methods and Tools, Ali Touran, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p380-383.

Recent Advances in Engineering Design Methodologies, Steven J. Fenves, (Analysis and Computation, Franklin

Y. Cheng, ed., 1994), p14-24.
Relation of Pracelogy to Engineering, Ronald A. Chadderton, El Oct. 94, p384-391.
Reliability Analysis of a Multi-Reservoir Water Distribution System, Shu-li Yang, Nien-Sheng Hsu, Peter W. F. Louie and William W-G. Yeh, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p855-858.
Representing Design Cases Based on Methods, B. Raphael,

B. Kumar and I. A. McLeod, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p255-292.

neering, Shalli Knozeimen, ed., 1994), p235-292. Risk-Based Decision Making in Water Resources VI, ISSN: 1063-5076, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994, 0-7844-0032-6, 381pp.

Simulating Learning Development for Construction, James D. Lutz, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p1655-1662.

Space Frame Solution for the Design of Large Pyramid Structures, T. J. DeGanyar, M. D. Griffin and M. R. Patterson, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p47-56.

Spread Footing Predictions, Kuo-Hsia Chang, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens,

ed., 1994), p157-159.

Statewide Consumptive Use Estimates, T. Teegarden, L. Pochop, G. Kerr and R. Delaney, (Water Policy and Management: Solving the Problems, Darrell G. Fontane,

ed. and Harry N. Tuvel, ed., 1994), p485-488.
Sustainable Management of Existing Reservoirs, Slobodan P. Simonovic, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p242-245.

Towards Practical Machine Learning Techniques, Yoram Reich, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p885-892.

UF Spread Footing Prediction, F. C. Townsend, P. Ruesta and R. Morgan, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p182-185.

Using Performance Assessment for Radioactive Waste Disposal Decision Making—Implementation of the Method-ology into the Third Performance Assessment Iteration of the Greater Confinement Disposal Site, David P. Gal-legos, Stephen H. Conrad and Thomas A. Baer, (High Level Radioactive Waste Management, High Level Ra-dioactive Waste Program Committee, 1994), p1671-1681.

Ventilation Considerations for Repository Subsurface Ad-vanced Conceptual Design, Hang Yang and Kalyan K. Bhattacharyya, (High Level Radioactive Waste Manage-ment, High Level Radioactive Waste Program Committee, 1994), p530-537.

Vertical Uplift Capacity of Horizontal Anchors, Kanaka-pura S. Subba Rao and Jyant Kumar, GT July 94,

p1134-1147.

Metric systems
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Metrication: Expensive and Impractical (ltr), CE Aug. 94, p26-27.

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An Attempt of an Aquifer Model with Lack of Data, Octavio Cabezut-Boo, Ricardo Anza and Luis Tubilla, (Hyvio Casezuci-poly, Nicator Anza and Lais Hubila, (17)-draulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p312-316. Mexican marriages, WP Spring 94, p2. The Mexican Migration, Virginia Fairweather, WP Spring

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issue 94, p2. No Time to Waste on Mexico Wastewater Project, CE Sept.

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Nonlinear Dynamic Response of an RC Structure with Ad-Nominear Dylamic Response or air RC Surfacture with Avavanced Cladding, Loai F. El-Gazairly, Barry J. Goodno and James I. Craig, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1262-1267. Three-Dimensional Seismic Analysis of La Villita Dam, A.-W. Elgamal, GT Dec. 92, p1937-1958.
Tunnelers Assess Markets and Machines, CE Aug. 94, p14.

Michigan

Behavioral, Social, and Institutional Aspects of Risk Analysis, Richard C. Schwing, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p340-341.

Frank Monasa, 56, Structural Engineering Professor, Dies While Awaiting Heart Transplant, NE Mar. 94, p15.

Lake Michigan Diversion at Chicago, William H. Espey, Jr., Oscar G. Lara and Robert L. Barkau, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p175-181.

Michigan is First to Test European Pavement, CE Jan. 94, p14,18.

Risk Analysis: Wet Weather Flows in S.E. Michigan, Jonathan W. Bulkley, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p89-101

Sub Must Indemnify Construction Manager, CE Oct. 94.

Three-Way Trade Saves Historic Michigan Bridges, CE Nov. 94, p22,24.

Micro piles Minipile Construction Keeps the Plant Running, CE May 94, p17.

Chemical Cleaning Process for Water Pipe Systems, Craig

Chemical Cleaning Process for Water Pipe Systems, Craig Edstrand, Allen Hieatt and Jerome Ludwig, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p288-295. ORP Measurement in Anaerobic Systems Using Flow-Through Cell, Munish Gupta, Ashutosh Gupta, Makram T. Suidan, Gregory D. Sayles and Joseph R. V. Flora, EE Nov./Dec. 94, p1639-1645.

U.S. Drinking-Water Regulations: Treatment Technologies and Cost, Benjamin W. Lykins, Jr. and Robert M. Clark, EE July/Aug. 94, p783-802.

Microbial activity

Bioleaching of Metals from Sewage Sludge: Elemental Sulfur Recovery, B. R. Ravishankar, J. F. Blais, H. Ben-moussa and R. D. Tyagi, EE Mar./Apr. 94, p462-470.

The ICR; \$130 Million of Water Quality Monitoring, Albert Ilges and Fredrick W. Pontius, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p788-791.

The Relationship of Speciation to Iron and Manganese Removal Strategies, Kenneth Carlson, William Knocke and Kevin Gertig, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p66-73.

Thermally Enhanced Bioremediation of a Gasoline-Contaminated Aquifer Using Toluene Oxidizing Bacteria, Rula Deeb and Lisa Alvarez-Cohen, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p400-407.

Advanced Uses of Pen Computers in Building Inspection, Raja R. A. Issa, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1454-1457.

Application of Pen Computing to Construction Inspection, Jason M. Jazayeri, Farid Jazayeri and Katherine Litchfield, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1438-1445.

Applying Portable Computing and Hypermedia to Con-struction, Trefor P. Williams, ME May/June 94, p41-45. Bridge Rating Using Influence Surface for Curved Bridge Structures, C. C. Fu, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p688-695

Bringing the Construction Foreman Into the Computer Age, Richard J. Coble, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1446-1453.

Computer Buying Guide for Engineering Students, J. K. Nelson, S. D. Schiff and D. A. Latimer, CC Apr. 94, p1,10-12

Computer Model for Infiltration System Design, Thomas N. Debo, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p241-248.

A Computerized Methodology for Conducting Pedestrian Gap Studies, John Tipaldo, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2066-2072

Decision Support System for Conjunctive Use Under Com-John W. Labadie and Jon Altenhofen, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p582-587.

DETMOD: A Desktop Estuarine Transport MODel, David G. Kleinschmidt and Bryan R. Pearce, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1032-1038.

An Infrastructure Records Management System Using PCbased Image Scanning Technology, Stephen M. Benz, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1806-1811.

Integrating Pen Computers with Other Keyless Data Systems for Construction Applications, Richard J. Coble and Charles J. Kibert, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1639-1646.

Microcomputer-Aided Analysis and Design of Spandrel Concrete Beams Subjected to Combined Bending and Torsional Loads, Nadar Ghafoori and Jeffrey Bucholc, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1711-1718.

PC Networking - A Case Study, Chester J. Zaremba, (Computing in Civil Engineering, Khalil Khozeimeh, ed.,

1994), p1867-1873.

A PC-Based Stochastic Project Scheduling and Costing Module, Kamalain K. Sha'ath and Gurdev Singh, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p9-16.

Pen Computers in Civil Engineering, Don M. Newell, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p1631-1638.

Personal Computer Model to Evaluate Performance of Construction Systems/Services, Dean T. Kashiwagi, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p502-506.

Practical Solution of the Flexibility to Stiffness Transformation Problem With a Mathematical Assistant for the Personal Computer, Thomas A. Lenox and Ronald W. Welch, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1465-1472.

Seismic Analysis of Reinforced Concrete Building Using Finite-element Techniques, Tom Panayotido and Jayant Vir, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1091-1098.

Simulating Learning Development for Construction, James D. Lutz, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1655-1662.

Software Interface in Engineering Applications, Charles E. Bowler, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1880-1883.

Teaching with Multimedia: Example and Issues, Rollin H. Hotchkiss, El July 94, p279-289.

A User Friendly Microcomputer Program for Liquefaction Potential Analysis, A. H. Wu, J. S. Hsu and A. Urzua, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p843-848.

Using Pen Computers in Post-Disaster Insurance Claim Settlements, Raja R. A. Issa, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2145-2148.

Microporosity

Immiscible Organic Liquid Recovery Using Unconfined Membranes, Leonard Jewell and Michael J. Semmens, (Critical Issues in Water and Wastewater Treatment, Jo-seph N. Ryan, ed. and Mare Edwards, ed., 1994), p90-

Histological Analysis of Microstructure of UASB Granules, H. K. Chui and H. H. P. Fang, EE Sept./Oct. 94, p1322-1326.

TEM Studies of Carbonation and ASR, G. W. Groves, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p211-216.

Microstructure

Advances in the Characterization of Cement Clinker, Hiroshi Uchikawa and Shunsuke Hanehara, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p231-313.

By-Product of Sulfur Recovery from Phosphogypsum as Concrete Aggregate, Amitava Roy, Gary R. Byerly and Roger K. Seals, MT Nov. 94, p439-452.

Characterization of Cement-Aggregate Interfaces by Electrical Conductivity Methods, Xie Ping and J. J. Beau-doin, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p15-25.

Chloride Diffusivity Computation for Cement Paste, E. J. Garboczi and D. P. Bentz, (Cement Manufacture and

Use, Paul W. Brown, ed., 1994), p159-173.

Effects of Process Zones on Crack Interactions, K. R. Shah, J. F. Labuz and H. K. Stolarski, EM Dec. 94, p2678-2693

Histological Analysis of Microstructure of UASB Granules, H. K. Chui and H. H. P. Fang, EE Sept./Oct. 94, p1322-1326.

Silica Fume (Microsilica) Fundamentals for Use in Concrete, Mark D. Luther and Philip A. Smith, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p75-106.

TEM Studies of Carbonation and ASR, G. W. Groves, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p211-216.

Microtunneling

Machine Makes Microtunneling Easy, CE July 94, p78.

Microtunneling Arrives in San Diego as an Attractive Alternative to Open Trenching, William J. Swallow, III, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p896-903.

Microtunneling Creates Pipe Roof in Record Time, CE Sept. 94, p11.

Microtunneling Goes West, CE Aug. 94, p16-17.

Microtunneling Techniques to Form an Insitu Barrier Around Existing Structures, Philip J. Coller and David G. Abbott, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p386-394.

To Microtunnel or Not to Microtunnel? The Construction of the Crown Point Trunk Sewer, Karen Larson Henry and Dave Zoumaras, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p73-81.

Trenchless Relief, Tad Pilecki, Stephen J. Klein and Art Hamid, CE Jan. 94, p58-60.

Microwaves

The History and Present Status of Microwave Aircraft, William C. Brown, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1482-1491.

Microwave Process Strips Structures of Lead Paint Safely and Cheaply, ET Apr./May 94, p1,3.

Solar Power Satellites, Sean Russell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p793-798.

Middle East

Influence of Geotextiles on Performance of Saline Sebkha Soils, Sahel N. Abduljauwad, Fouad Bayomy, Abdul-Karim M. Al-Shaikh and Omar S. Baghabra Al-Amoudi, GT Nov. 94, p1939-1960.

Middle Eastern Concrete Deterioration: Unusual Case History, Jerome P. O'Connor, CF Aug. 94, p201-212.

Migration

Dispersivity in Heterogeneous Permeable Media, Dwayne A. Chesnut, (High Level Radioactive Waste Manage-ment, High Level Radioactive Waste Program Committee, 1994), p1822-1841.

Dredged Material Disposal and Migratory Birds, Les E. Weigum, (Dredging '94, E. Clark McNair, Jr., ed.,

1994), p1380-1387.

Dust Levitation on the Moon, Frederick A. Slane, Nebojsa Duric and Jack O. Burns, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p897-906.

Engineering Implications of Levitating Lunar Dust, Frederick A. Ślane, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley

Lokaj, ed., 1994), p1097-1105.

FY93 Thermal Loading Systems Study, Steven F. Saterlie and Brent H. Thomson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p573-585.

How Should the Migration and Retardation of Colloids be Characterized? Peter Grindrod, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p2709-2718.

The Levitation of Lunar Dust Via Electrostatic Forces, S. Doe, J. O. Burns, D. Pettit, J. Blacic and P. W. Keaton, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p907-915.

Migration of Backward-Facing Step, Hong-Yuan Lee and Shie-Tsung Hwang, HY June 94, p693-705.

Migration of Conservative and Poorly Sorbing Tracers in Granite Fractures, Tjalle T. Vandergraaf, Chung-Kyun Park and Douglas J. Drew, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2251-2256.

Numerical Studies of Radionuclide Migration in Layered Porous Media, Robert L. Buckley, Sudarshan K. Loyal-ka and M. M. R. Williams, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p1842-1847.

Precipitation Kinetics of Radioactive Elements and Their Effect Upon Redox Conditions of the Nearfield, Hiroyasu Takase and Peter Grindrod, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p491-500.

Radionuclides Migration in Fractured Porous Rock: Analytical Solutions for Various Boundary Conditions, Shih-Hai Li and Shean-Lang Chiou, (*High Level Radioactive Waste Management*, High Level Radioactive Waste Program Committee, 1994), p1344-1349.

Saturation and Gas Migration Within Clay Buffers, Peter Grindrod, Michael Impey, Syra Saddique and Hiroyasu Takase, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2069-2075.

Simulated Waste Package Test in Salt, Hemendra N. Kalia, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1930-1937.

- Stochastic Modeling of Spatial Heterogeneities Conditioned to Hydraulic and Tracer Tests, Akhil Datta Gupta, D. W. Vasco, J. C. S. Long and Stratis Vomvoris, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2624-2632.
- Wetting Phase Permeability in a Partially Saturated Horizontal Fracture, M. J. Nicholl and R. J. Glass, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2007-2019.

Military engineering

- Bubba, A Teleoperated Countermine Vehicle, Dave Hayward, Bryan Pletta, Jerry Clifford and Kerry Habiger, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p464-473.
- Computer-Assisted Planning, Programming, Budgeting System (CAPPB), Bruce C. Goettel, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p390-395.
- The Engineer Vehicle Tele-operation Capability, David J. Busse and Joseph R. Urda, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p474-480.
- Military Robots Revamped for Environmental Duty, CE Dec. 94, p23.

Mine wastes

Evaluation of Consolidation Behavior of Mine Tailings, K. J. L. Stone, M. F. Randolph, S. Toh and A. A. Sales, GT Mar. 94, p473-490.

Mineral analysis

- Delayed Ettringite Formation, H. F. W. Taylor, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p122-131.
- Fluxes and Mineralizers in the Clinkering Process, A. Palomo, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p64.

Mineral deposits

- The Cigar Lake Analog Study: An Interational R&D Project, Jan J. Cramer and F. Peter Sargent, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2237-2242.
- Energy Analysis of High Temperature Lunar Manufacturing Processes, Belinda Wong-Swanson and Rocco Fazzolari, Léngineering, Construction, and Operations in Space IV. Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p697-707.
- Evidence for a Welded Tuff in the Rhyolite of Calico Hills, Robert P. Dickerson and W. Clay Hunter, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1861-1868.
- Geoscientific Studies in the Tono Area, Japan, T. Nohara, T. Tsuboya, M. Yamakawa, H. Sakuma and Y. Yusa, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2243-2250.
- Isotopic Tracers of Gold Deposition in Paleozoic Limestones, Southern Nevada, Z. E. Peterman, B. L. Widmann, B. D. Marshall, J. N. Aleinikoff, K. Futa and S. A. Mahan, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1316-1323.
- Mineral Liberation and Beneficiation of Lunar High-Ti Mare Basalt, 71055: Digital-Imaging Analyses, John G. Chambers, Lawrence A. Taylor, Allan Patchen and David S. McKay, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p878-888.
- Natural Analogues and Performance Assessment, Paul L. Cloke, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1329-1336.
- Radiation Effects from Uranium Ore Bodies, James O. Duguid, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1337-1343.

- A Remote Sensing Evaluation of Lunar Pyroclastic Deposits, B. Ray Hawke and Cassandra R. Coombs, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1008-1019.
- Robotic Options for Mining of Near-Earth Objects, Russell J. Miller and Robin R. Murphy, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p457-463.
- Kinter, ed., 1979, pp37-weight Update of the Implications of Recent Space Resource Discovery, Anthony Zuppero and Pat Whitman, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p532-541

Mineralogy

- Delayed Ettringite Formation, H. F. W. Taylor, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p122-131.
- Microstructure of the Paste Aggregate Interface, Including the Influence of Mineral Additions, J. P. Ollivier and M. Massat, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p175-185.
- Petrographic and Geochemical Characteristics of a Section Through the Tiva Canyon Tuff at Antler Ridge, Yucca Mountain, Nevada, Frances R. Singer, Frank M. Byers, Jr., Beth L. Widmann and Robert P. Dickerson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1869-1879.

Mines

- Quake an Act of (Human) Nature?, CE June 94, p8.
- U.S. Experience with Dynamic Compaction of Collapsible Soils, Kyle M. Rollins and Ji-Hyoung Kim, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p26-43.

Minimum weight design

- Augmented Lagrangian Genetic Algorithm for Structural Optimization, Hojjat Adeli and Nai-Tsang Cheng, AS Jan. 94, p104-118.
- Concurrent Genetic Algorithms for Optimization of Large Structures, Hojjat Adeli and Nai-Tsang Cheng, AS July 94, p276-296.

Mining

- Analysis of Glass-Ceramic Production from Lunar Resources, W. H. Poisl, B. D. Fabes, D. Allen, S. Hawley and A. Carpenter, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1278-1287.
- The Challenge of Mining He-3 on the Lunar Surface: How All the Parts Fit Together, Igor N. Sviatoslavsky, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p668-677.
- Helium-3 on the Moon: Model Assumptions and Abundances, Lawrence A. Taylor, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p678-686.
- Hydrodynamics of Mining Pits in Erodible Bed under Steady Flow, Mohammad Akram Gill, HY Nov. 94, p1337-1348.
- In-situ Extraction of Lunar Soil Volatiles, Layton J. Wittenberg, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p687-696.
- Intelligent Excavator Control for a Lunar Mining System, Paul J. A. Lever, Fei-Yue Wang and Deqian Chen, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p97-105.
- Is It Possible to Colonize Mars? Jonathan Hurley and Steve Garcia, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p782-786.
- JSC-1: A New Lunar Soil Simulant, David S. McKay, James L. Carter, Walter W. Boles, Carlton C. Allen and Judith H. Allton, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p857–866.

Living in Space, Michael Wifall, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p842-845.

Lunar Mining, Carrie Barkhurst, (Engineering, Construc-tion, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p811-814.

Lunar Oxygen Production in a Hydrogen "Cold" Plasma, Daniel E. Bullard, Peter E. Nolan and David C. Lynch, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1188-1198.

Managing the Russian River Aggregate Resources, James J. Jordan, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel,

ed., 1994), p838-841.

Mineral Liberation and Beneficiation of Lunar High-Ti Mare Basalt, 71055: Digital-Imaging Analyses, John G. Chambers, Lawrence A. Taylor, Allan Patchen and David S. McKay, Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p878-888.

Planning Intricate Robot Motions to Remove Natural Materials, Sudheer M. Apte and Irving J. Oppenheim, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p106-114.

A Real-Time Control Network for Robotic Mining, William H. Schiffbauer, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p437-447.

Remote Sensing of Astrofuel™, K. R. Harris, H. Y. Khater and G. L. Kulcinski, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and

Stanley Lokaj, ed., 1994), p648-657.

J. Miller and Robin R. Murphy, (Robotic for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p457-463.

Soil-Structure Interaction During Mining Induced Ground Movements, Guoming Lin, Eric C. Drumm, Richard M. Bennett, Larry Powell and Ted Triplett, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p786-797.

Transferring Construction Technology to the Moon and Back, John F. Connolly and Debra D. Shoots, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1086-1096.

Wetlands Return to Former Mining Site, CE Oct. 94, p25.

Court Clarifies Subcontractor Indemnity, CE May 94, p30. Design and Testing of Two Ice-Preserving Winter Lake esign and results of two tee-rieserving winter Lake Aeration Systems, Christopher R. Ellis and Heinz G. Stefan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1326-

Unsuccessful Bidder Succeeds on Wage Issue, CE July 94, p24-25.

Minority groups

Civil Engineering Partnerships for Education, CE Oct. 94, p6.

Conduct and Competitiveness Determine Acceptance (ltr), CE Dec. 94, p30-31.

Education and Research in Water and Environment: Collaboration Between Minority and Majority Institutions, Neil S. Grigg, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p81-84.

Engineers Should Create Their Own Opportunities (ltr), CE Oct. 94, p29.

Heed the Call for Enhanced Opportunities (ltr), CE Oct. 94, p32.

Human-Resource Management for Twenty-First Century: Managing Diversity, Deborah A. Foley, El Apr. 94, p121-128.

Improving Effectiveness of Equal Business Opportunity Programs, Zuhair El-Itr and Roozbeh Kangari, El July 94, p295-312.

Minority Contractors: Framework for New Policy Development, Zuhair El-Itr and Roozbeh Kangari, CO Sept. 94, p632-648.

Past, Present, and Future of ASCE: Equal Opportunity Programs, Francis E. Griggs, Jr., El Apr. 94, p198-211.
Prejudice Comes in All Forms (ltr), CE Nov. 94, p30.

Prejudices and Stereotypes Are Still Around (ltr), CE Dec. 94, p29-30.

Problems Faced by Faculty in Minority Institutions, Emmanuel U. Nzewi, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p89-92.
Procurement Issues, Delon Hampton, ME Nov./Dec. 94,

p45-49.

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Summer Engineering Outreach Program for Native Americans, Omnia El-Hakim, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p868-872.

Water Resources Education and Research at a Model HBCU Water Resources Center, Victor I. Okereke, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

White Male Engineers' Encouraged Her Career (ltr), CE Oct. 94, p32,35.

Effects of Dust and Thermal Cycling on Telescope Mirror Performance, Koon Meng Chua, R. Eric Pease and Stewart W. Johnson, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p916-932.

Donal, C. 1, 294, p. 167-93.
Optical Scatter From a Space Craft Mirror Due to Microscopic Impacts, Lawrence B. Crowell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p.368-377.

Mississippi
Coffee, Tea or Clean Water?, CE May 94, p8.
Corps-Modified Levees Just Ducky for Waterfowl, CE Apr. 94, p22.

Final Payment Frees Contractor From Sub's Claims, CE

Aug. 94, p24. World's Largest Floating Casino is Firmly Secured, CE Oct. 94, p19-20.

Mississippi River

1993 Mississippi Record Stages and Levee Failures, Sally McConkey, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p603-

Bridge Scour During the 1993 Floods in the Upper Missis-sippi River Basin, Gordon G. Barksdale, (Hydraulic En-gineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p21-25.

Climatic Perspective on the 1993 Mississippi R. Flood, Kenneth E. Kunkel, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p600-602.

Damage to Highway Infrastructure 1993 Mississippi River Basin Flooding, A. C. Parola, T. E. Fenske and D. J. Hagerty, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p26-30.

Effects from Thin-Layer Disposal of Dredged Material on Water Quality in Mississippi Sound, Susan Ivester Rees and Pace Wilber, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1481-1489. Environmental Effects of Flooding at a USCG Base, Vir-

ginia L. Bretzke and Michael J. Donnelly, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p781-787.

Frequency of the 1993 Flood in the Upper Mississippi River Basin, W. O. Thomas, Jr. and D. A. Eash, (Hydraulic Engineering) '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p16-20.

Historical Trends in Flood Discharges on the Upper Mississippi River, H. Vernon Knapp, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1904).

1994), p618-622. Impacts of the 1993 Flood on the Mississippi River in Illinois, Nani G. Bhowmik, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p613-617.

Lake Michigan Diversion at Chicago, William H. Espey, Jr., Oscar G. Lara and Robert L. Barkau, (Hydraulic En-gineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p175-181.

Life (and Travel) on the Mississippi Gets Better, CE Aug.

94, p10.

The Miller City Levee Break and Incipient Meander Cutoff, K. A. Oberg and R. B. Jacobson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p623-627.

The New Clark Bridge: Saddle-Draped Cables, David

The New Clark Diluge. Statute-Drapeu causes, See Goodyear and Ralph Salamie, CE Aug. 94, p46-49.

Opening Remarks by Robert L. Wiegel, Robert L. Wiegel, Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p194-197

Real-Time Data Collection of Scour at Bridges, David S. Mueller and Mark N. Landers, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p104-113.

Seismic Evaluation of the Tied-arch Bridge Across the Mississippi River on I-40, W. David Liu, Roy A. Imbsen, Richard J. LeBeau, Farid S. Nobari and Lelio H. Mejia, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p355-360.

Soft Dikes an Answer to Stone-Dike Collisions, CE Sept.

94, p20-21.

39. p. 2021.
The Summer of 1993 Floods Lower Missouri River, William H. Espey, Ir., Leo R. Beard and John E. Reinfurt, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p628-633.

Temporal and Spatial Variations of Suspended Sediment Concentration during Navigation Traffic in a Natural River, Renjie Xia, Ta Wei Soong and Nani G. Bhowmik, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1131-1135.

Velocity and Turbulence Measurement from the Illinois and Mississippi Rivers, Ta Wei Soong and Nani G. Bhowmik, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p62-75.

Water Injection Dredging in the United States, David Knox, Daniel J. Krumholz and James E. Clausner, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p847-856

When the Levee Breaks, James Denning, CE Jan. 94, p38-41

Architect is Liable to Owner Only, CE Sept. 94, p27. St. Louis Complex's Hefty Crown, CE Nov. 94, p14.

Missouri River

Analysis of Missouri River System Operations Alternatives, Roy McAllister, Lawrence Cieslik, Tom Cannon and Lon Hachmeister, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p814-817.

Development and Application of Long Range Study (LRS) Model for Missouri River System, George A. Patenode and Karen L. Wilson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry

N. Tuvel, ed., 1994), p677-680.

Development of a Wetland/Riparian Resource Model for the Missouri River System, C. McShane, D. Becker, R. Tressler, J. Cannon and J. Rude, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p746-749.

Development of Fisheries Models for the Missouri River System, Mark Harberg, Doug Latka, Tom Cole, John Nestler and Gene Ploskey, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p742-745.

Development of Missouri River Navigation Analysis,

David Gjesdahl and Arthur Hawnn, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p686-689.

Lewis and Clark Rural Water System: A Regional Approach to Solving Domestic Water Supply Problems for a Tri-State Area, Pamela A. Bonrud, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p161-164.

Missouri River Economic Impacts Model, Charles Hiller-son and Ronald Roberts, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p637-640.

Missouri River Least Tern and Piping Plover Model Development, R. Tressler, R. Fairbanks, D. Latka, J. Glassley, K. Engel and J. Rude, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p750-753.

Missouri River Master Manual Review and Update, Lawrence J. Cieslik and Roy F. McAllister, Jr., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p673-676.

Missouri River Recreation Economic Analysis, Ronald C. Roberts and R. Scott Jackson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p681-685.

Optimization and Reservoir Operations for the Missouri River, Inês C. L. Ferreira and Jay R. Lund, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p93-96.

When the Levee Breaks, James Denning, CE Jan. 94, p38-

Mixed waste

Negotiating Equity for Management of DOE Wastes, Sam A. Carnes, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1-8.

Biological Fluidized Beds Containing Widely Different Bioparticles, Kyoung S. Ro and Johannes B. Neethling, EE Nov./Dec. 94, p1416-1426.

Computation of Transverse Mixing In Streams, Alexander C. Demetracopoulos, EE May/June 94, p699-706.

A Deep Soil Mix Cutoff Wall at Lockington Dam, Ohio, Andrew D. Walker, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p133-145.

Dispersivity in Heterogeneous Permeable Media, Dwayne A. Chesnut, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Comtee, 1994), p1822-1841.

Durability of Calcium Aluminate Cement Concretes, A. Capmas and C. M. George, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p377-405.

Field Tests on Small Marine Outfall, James J. Sharp, EE Mar./Apr. 94, p471-477.

Goal Programming Model for Distributing and Blending Desalinized Water, Abdulaziz S. Alidi and Taqi N. Al-Faraj, WR May/June 94, p267-275.

The Impacts of Roughness Bars on the Mixing Processes, Jianlu Xu and Hsieh Wei Shen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p533-537.

Knowledge-Based Expert System for Concrete Mix Design, Yong Bai and Serji N. Amirkhanian, CO June 94, p357-373.

Mixed-Layer Hydrothermal Reservoir Model, Poshu Huang, Joseph L. DiLorenzo and Tavit O. Najarian, HY July 94, p846-862.

Mixing of Thermal Discharges at Low Froude Numbers, C. Liang Lee and Patrick J. Ryan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p538-542.

Modeling Full-Scale Diffused Aeration Systems, Terry L. Johnson and Ross E. McKinney, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p702-709.

Modeling Horizontal Round Buoyant Jets in Shallow Water, A. J. Johnston, C. R. Phillips and R. E. Volker, HY Jan. 94, p41-59.

Modeling Initial Mixing of Ocean Wastewater Discharges to Develop Toxic Effluent Limitations, Christopher C. Obropta and Scott T. Taylor, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1047-1054.

A Numerical Study of Hydraulic Jump and Mixing in a Stratified Channel With a Sill, Ping Chen, R. Grant Ingram and Jianping Gan, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p119-133.

Selective Withdrawal Using Circular, Partly Submerged In-take Structures, James J. Sharp and T. M. Parchure, HY

May 93, p615-627.

Soil Mix Walls in Difficult Ground, David S. Yang and Shigeru Takeshima, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p106-120.

Vortex Convection Produced by V-Shaped Dihedral Ob-struction, Takashi Asaeda, Pham Hong Son and Steven

Armfield, HY Nov. 94, p1274-1291.

Wind-Driven Dispersion in New Jersey Coastal Waters, A. K. M. Quamrul Ahsan, Michael S. Bruno, Lie-Yauw Oey and Richard I. Hires, HY Nov. 94, p1264-1273.

Comparison of Unconfined- and Confined-Creep Tests for Hot Mix Asphalt, E. R. Brown and Kee Y. Foo, MT May 94, p307-326.

Innovative Civil Engineering Material from Sewage Sludge: Biocement and Its Use As Blended Cement Material, Joo-Hwa Tay and Kuan-Yeow Show, MT Feb. 94, p23-33.

Knowledge-Based Expert System for Concrete Mix De-sign, Yong Bai and Serji N. Amirkhanian, CO June 94, p357-373.

Performance of Fuel-Resistant Sealers for Asphalt Con-

crete Pavements, James E. Shoenberger, MT Feb. 94, p137-149. Roller-Compacted Concrete, U.S. Army Corps of Engineers, 1994, 0-87262-999-6, 100pp.

Drivetrain Design, Incorporating Redundancy, for an Autonomous Walking Robot, Gerald P. Roston and Kevin Dowling, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p184-192.

Enabler Chassis Features and Mobiltiy Analysis, James S. Hollinger, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994),

p210-219.

Environmental Hardening of a Mobile-Manipulator System for Nuclear Environments, Sammy L. Jones, Timothy Cable, James S. Tulenko, Stoyan Toshkov and Fred R. Sias, Jr., (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p296-303.

An Experiment in Mobile Robotic Cooperation, Lynne E. Parker, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p131-

Goals and Requirements for Scientific Lunar Rovers, Charles Meyer, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p166-174.

Houdini: In-Tank Mobile Cleanup Robot, Hagen Schempf, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p286-295.

Integrating Pen Computers with Other Keyless Data Sys tems for Construction Applications, Richard J. Coble and Charles J. Kibert, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1639-1646.

A Minimum Mars Mission Approach, Systems Engineering Division Mars Study Team, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1309-1322.

Mobile Homes Will Stand and Deliver, CE Mar. 94, p8. A Mobile Robot for Reconnaissance of HAZMAT Incident Sites, Richard V. Welch, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p269-277.

Navigation of Autonomous Mobile Robots, Georges Blaha and Stephen R. Gerig, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed.,

1994), p70-78.

A New Robotic System Concept for Automating Highway Maintenance Operations, S. E. Winters, D. Hong and S. A. Velinsky, (), p374-382.

An Overview of the Accident Response Mobile Manipula-tion System (ARMMS), W. D. Morse, D. R. Hayward, D. P. Jones and A. Sanchez, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p304-310.

Recent Developments in the Robotic All Terrain Lunar Exploration Rover (RATLER) Program, P. R. Klarer, (Robotics for Challenging Environments, Laura A. Demsetz,

ed. and Paul R. Klarer, ed., 1994), p202-209.

Modal analysis

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Direct and Modal Analyses for Shape-Finding of Unstable Structures, Tetsuyuki Tanami and Yasuhiko Hangai, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p714-723.

Modal Filter Based Structural Control of a Highway Bridge, S. J. Shelley, E. A. Aktan and K. L. Lee, (Analysis and Computation, Franklin Y. Cheng, ed., 1994),

Modal Identification of Cable-Stayed Pedestrian Bridge, Mack G. Gardner-Morse and Dryver R. Huston, ST Nov. 93, p3384-3404.

Spherical Domes Subjected to Horizontal Earthquakes, Haruo Kunieda, Shigehiro Morooka and Koji Onodera (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p229-238.

Story-Drift, Shear, and OTM Estimation from Building Seismic Records, S. T. Mau and V. Aruna, ST Nov. 94,

p3366-3385.

Model accuracy

Dredged Material Dispersion and Accumulation at a Deep Ocean Disposal Site: Comparison of Monitoring Study Results and Model Predictions, Catherine A. Courtney, Albert Mills Soldate, Jr., Jeff Cox and James A. Blake, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p96-

Evaluation of Runoff and Erosion Models, Tien H. Wu, James A. Hall and James V. Bonta, IR Mar./Apr. 93,

p364-382

Model-Correction-Factor Method in Structural Reliability, Ove Ditlevsen and Torben Arnbjerg-Nielsen, EM Jan.

94, p1-10.

Site Characterization by Artificial Neural Networks, Donna M. Rizzo, David E. Dougherty and Theodore P. Lillys, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p250-253.

Model analysis

Moder annysm Ac Comparative Analysis of Estuarine Circulation Simulation Using Laterally Averaged and Vertically Averaged Hydrodynamic Models, C. Kirk Ziegler, Jerad D. Bales, Jeanne C. Robbins and Alan F. Blumberg, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p447-460.

Condition Assessment of Highway Bridges, Taner Aksel, Kuo-Liang Lee and Emin A. Aktan, (Structures Con-gress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p1124-1130.

Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994, 0-87262-975-9, 696pp.

Neural Networks for River Flow Prediction, Nachimuthu Karunanithi, William J. Grenney, Darrell Whitley and Ken Bovee, CP Apr. 94, p201-220.

A Theoretical Framework for Risk Assessment, George Apostolakis, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p82-88.

Energy Dissipation for a RCC Stepped Spillway, Charles E. Rice and Kem C. Kadavy, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p548-552.

Estimation of Spillway Free Jet Trajectory Lengths, Peter J. Rae and Diana Hurdowar-Castro, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p421-425.

Experimental Design and Measurement Techni vestigation of Two-Phase Flow, Andreas J. Kuck, (Fundamentals and Advancements in Hydraulic Measure-ments and Experimentation, Clifford A. Pugh, ed., 1994), p86-93.

Mixing of Thermal Discharges at Low Froude Numbers, C. Liang Lee and Patrick J. Ryan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p538-542

MPC Closure Weld Model Study, Brain J. Kruse, Joe B. Stringer and Giles G. Childress, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p435-443.

Pressure-Time Flow Rate in Low Head Hydro Plants, Charles W. Almquist, David B. Hansen, Gerald A. Schohl and Patrick A. March, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p445-453.

AISI-FHWA Model Bridge Test, Mark Moore, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1065-1070.

Arching in Piled Embankments, B. K. Low, S. K. Tang and V. Choa, GT Nov. 94, p1917-1938.

Bearing Capacity of Shallow Foundations on Noncohesive Soils, Bohdan Zadroga, GT Nov. 94, p1991-2008.

Combinatary Net-Shell Roofs of Elliptic Paraboloid of Zhaoqing Gymnasium, Fa-Kun Yao, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p642-651.

The Control of Settlement Using Geogrids, Gunther E. Bauer, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and

Guy Y. Félio, ed., 1994), p491-501.

Geocell Mattress Effects on Embankment Settlements, Mark D. Evans, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed.

and Guy Y. Félio, ed., 1994), p584-597.

Ground Movements from Model Tieback Wall Construc-tion, Christopher G. Mueller, James H. Long, Edward J. Cording and David E. Weatherby, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1337-1352.

Model Tests on Caissons, Sreenivas Alampalli and Venka-tanarayana Peddibotla, (Vertical and Horizontal Defor-mations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p325-336.

Nonlinear Undrained Lateral Response of Rigid Drilled Shafts Using Continuum Theory, Paul W. Mayne, Fred H. Kulhawy and Charles H. Trautmann, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p663-676.

The Role of Long Waves in Sand Bar Formation - a Model Exploration, Tim O'Hare, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C.

Kraus, ed., 1994), p74-88.

Wave Transformation and Load Reduction Using a Small Tandem Reef Breakwater - Physical Model Tests, Anrandem Reel Breakwater - Physical Model Tests, Andrew Cornett, Etienne Mansard and Edgar Funke, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p1008-1023.

West Breakwater Sines Definitive Rehabilitation, General cest Breakwater Sines Definitive Renabilitation, General Concept, H. Ligteringen, F. Silveira Ramos, J. W. van der Meer and M. Rita, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mount Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p168-186.

Wind Studies of the Owensboro Bridge, Kentucky, P. A. Irwin, V. Chandra, J. Xie and G. K. Stone, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p887-893.

Model verification

395

3D Free Surface Flow Model Verification - A Panel Discussion on Test Cases, Sam S. Y. Wang, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p910-912.

3D model verification for a groyne and harbor experiment, P. Mewis and K. -P. Holz, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p905-909.

Ambrose, R. B. T. S. Wu and S. C. McCutcheon, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p890-894.

Command Area Water Demands. I: Validation and Calibration of UCA Model, Seigo Yamashita and Wynn R. Walker, IR Nov./Dec. 94, p1025-1042.

Command Area Water Demands. II: Water-Demand Function, Seigo Yamashita and Wynn R. Walker, IR Nov./

Dec. 94, p1043-1055.

Demonstration of the Wes New York Bight Hydrodynamic Model in Long Island Sound, S. Rao Vernulakonda and Norman W. Scheffner, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p309-322.

Estimation of Peak Flow and Runoff Volume with Re-

Surface Method, Shie-Yui Liong and Yaacob Ibrahim, WR Mar/Apr, 94, p161-175. Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994, 0-87262-975-9, 696pp.

Evaluation of Runoff and Erosion Models, Tien H. Wu, James A. Hall and James V. Bonta, IR Mar./Apr. 93,

Experimental Design and Measurement Techniques for Investigation of Two-Phase Flow, Andreas J. Kuck, (Fundamental Measurement Techniques of Investigation of Two-Phase Flow, Andreas J. Kuck, (Fundamental Measurement Techniques of Investigation of Two-Phase Flow, Andreas J. Kuck, (Fundamental Measurement Techniques of Investigation of Two-Phase Flow, Andreas J. Kuck, (Fundamental Measurement Techniques of Investigation of Two-Phase Flow, Andreas J. Kuck, (Fundamental Measurement Techniques of Investigation of Two-Phase Flow, Andreas J. Kuck, (Fundamental Measurement Techniques of Investigation of Two-Phase Flow, Andreas J. Kuck, (Fundamental Measurement Techniques of Investigation of Two-Phase Flow, Andreas J. Kuck, (Fundamental Measurement Techniques of Investigation of Two-Phase Flow, Andreas J. Kuck, (Fundamental Measurement Techniques of Investigation of Two-Phase Flow, Andreas J. Kuck, (Fundamental Measurement Techniques of Investigation of Two-Phase Flow, Andreas J. Kuck, (Fundamental Measurement Techniques of Investigation of Two-Phase Flow, Andreas J. Kuck, (Fundamental Measurement Techniques of Investigation of Two-Phase Flow, Andreas Ontology of Investigation of Investi damentals and Advancements in Hydraulic Measure-ments and Experimentation, Clifford A. Pugh, ed., 1994), p86-93.

Experimental Verification of Beam Models for RC, Toshikatsu Ichinose and Katsuki Takiguchi, ST Aug. 94,

p2261-2280.

Experimental Verification of Numerical Model for Nonlinear Wave Evolutions, Takumi Ohyama, Serdar Beji, Kazuo Nadaoka and Jurjen A. Battjes, WW Nov./Dec. 94, p637-644.

A Field and Modeling Study of Residual Circulation in Sarasota Bay and Tampa Bay, Florida, Y. P. Sheng and S. J. Peene, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p641-655.

Identification of A Field Data Collection Program in Delaware Bay, B. H. Johnson, K. W. Kim, T. L. Fagerberg and H. A. Benson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

Micromechanics Modeling for Stress-Strain Behavior of Granular Soils. II: Evaluation, Ching S. Chang, Mohammed G. Kabir and Yang Chang, GT Dec. 92, p1975-

Modeling 3D Ground-Water Flow by Modified Finite-Element Method, Fang Xin Yu and Vijay P. Singh, IR Sept./Oct. 94, p892-909.

Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994, 0-7844-0035-0, 375pp.

Numerical Modeling of Advective and Diffusive Transport in the Rappahannock Estuary, Virginia, Kyeong Park and Albert Y. Kuo, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p461-474.

Numerical Modeling of Fluid Mud Transport in Estuaries, Yan Yan and Earl J. Hayter, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p1070-1074.

PSF-PM Verification of 3D Free Surface Flow Models, Sam S. Y. Wang and F. Mauricio Toro-Botero, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p895-899.

- San Francisco Bay Test Case for 3-D Model Verification, Peter E. Smith, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p885-
- Validation of the European Yield Model for Nailed Connections, Steve G. Winistorfer, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p923-928.
- Verification of A 1-Dimensional Model for Predicting Shallow Infiltration at Yucca Mountain, Joseph A. Hevesi, Alan L. Flint and Lorraine E. Flint, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2323-2332.

Verification of a Three-Dimensional Model of Delaware Bay, K. W. Kim, B. H. Johnson and J. Gebert, (Hydrau lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p574-578.

Verification of Numerical Modeling of the Fate of Disposed Dredged Material, Michelle M. Thevenot and Billy H. Johnson, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p180-189.

Verification of the AECL Total System Performance Models, Keith Kersch and Steve Oliver, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p2437-2441.

Wastewater Treatment Optimization Model for Developing World II: Model Testing, S. L. Tang and K. V. Ellis, EE

May/June 94, p610-624.

A Wind Driven Lake Circulation Finite Element Model for the Upper St. Marys River, E. M. Yuen and J. A. McCorquodale, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p584-588

Action-Response Model and Loss of Productivity in Construction, David W. Halligan, Laura A. Demsetz, James D. Brown and Clark B. Pace, CO Mar. 94, p47-64.

Adsorption of 1,1,2-Trichloroethane from River Water, Roberto M. Narbaitz and Andrew Benedek, EE Nov./ Dec. 94, p1400-1415.

Advanced Continuum Traffic Flow Models for Congested Freeways, Anastasios S. Lyrintzis, Ping Yi, Panos G. Michalopoulos and Dimitrios E. Beskos, TE May/June 94, p461-477.

Advances in the Modelling of Long Span Bridges for Wind Effects, J. Peter C. King and Alan G. Davenport, (Struc-tures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p875-880.

Alternative Approaches to Reliability Modeling of a Multi-ple Engineered Barrier System, Malwane M. A. Ananda and Ashok K. Singh, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1030-1036.

Analysis of Deep Excavation in Boston, Andrew J. Whittle, Youssef M. A. Hashash and Robert V. Whitman, GT Jan.

93, p69-90.

Analyzing Larval Fish Distributions Using Hydrodynamic naiyzing Larvai Fish Distributions Using Hydrodynamic and Transport Modelling, John Eric Edinger, Edward M. Buchak and Michael D. McGurk, (Estuarine and Coast-al Modeling III, Malcolm L. Spaulding, ed., Keith Bed-ford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p536-550. Appropriateness of One-Dimensional Calculations for Re-

pository Analysis, Roger R. Eaton, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p1492-1500.

Approximating the Imbibition and Absorption Behavior of a Distribution of Matrix Blocks by an Equivalent Spherical Block, Robert W. Zimmerman and Gudmundur S. Bodvarsson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2030-2037

Average-Bid Method—Competitive Bidding Strategy, Photios G. Ioannou and Sou-Sen Leu, CO Mar. 93,

p131-147.

Band Width in Joint Adjustment of Geodetic Networks Having Common Points, Olcay Öztan, Yunus Kalkan, Zafer Kızılsu and Ufuk Özerman, SU Feb. 94, p3-10. Best Route GIS System, Siripong Malasri and L. Yu Lin, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1123-1130.

Boundary Conditions and Flow Patterns in a Mountain River, Andrew J. Miller, Diane M. L. Mas, James A. Smith and Wei-Hao Chung, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p762-766.

Boundary Forcing and a Dual-Mode Calculation Scheme for Coastal Tidal Models Using Step-Wise Bathymetry, James K. Lewis, Y. Larry Hsu and Alan F. Blumberg, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p422-

Breakout Session 5A: Emissions Modeling, Alan Goldman, Terry Miller and Guido Schattanek, (*Transportation Planning and Air Quality II*, Thomas F. Wholly, ed.,

1994), p155.

Breakout Session 5B: Microscale Modeling, Paul Benson, Don DiCristofaro, Richard Schoeneberg and John Zamurs, (Transportation Planning and Air Quality II,

Zamurs, (*Transportation Framing and Air Quality it*, Thomas F. Wholly, ed., 1994), p156-157. Breakout Session 5C: Regional Modeling, Jon Anderson, Richard Burkhart and Gus von Bodungen, (*Transporta*tion Planning and Air Quality II, Thomas F. Wholly, ed.,

1994), p158-160.

Breakout Session 6B: IVHS, Haitham Al-Deek and Michael Meyer, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p162-163.

Characterization of an ER Active Member, Henri P. Gavin and Robert D. Hanson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p863-868.

Characterization of Circulation and Salinity Change in Galveston Bay, Keh-Han Wang, EM Mar. 94, p557-579. Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Mar-cel, ed. and Nicholas C. Kraus, ed., 1994, 0-7844-0043-1, 983pp.

Coastal Eutrophication and Temperature Variation, Jacques Ganoulis, Stilianos Rafailidis, Istvan Bogardi, Lucien Duckstein and Istvan Matyasovszky, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv,

ed., 1994), p317-330. Collapse Loads of Continuous Skew Composite Bridges, Alaa Helba and John B. Kennedy, ST May 94, p1395-

Colorado River Decision Support System, Larry Brazil and Ross Bethel, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuv-

el, ed., 1994), p307-310.

A Comparative Analysis of Estuarine Circulation Simula-Comparative Analysis of Essuarine Circulation Similarion Using Laterally Averaged and Vertically Averaged Hydrodynamic Models, C. Kirk Ziegler, Jerad D. Bales, Jeanne C. Robbins and Alan F. Blumberg, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p447-460.

Comparing Two OODBMSs: An Application Developer's Perspective, Nancy K. Wiegand and Teresa M. Adams, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p1412-1418.

Comparison of a Wave Transformation Model with LIP-11D Data, Francisco J. Rivero, Agustín S.-Arcilla and Dénes Beyer, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p518-532.

Comparison of Eulerian-Lagrangian, Random Walk and Hybrid Methods of Modeling Pollutant Transport, Jeffrey C. Moeller and E. Eric Adams. (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p609-623.

Comparison of Infiltration Equations Using Flooding Infiltrometer Data, David B. Thompson and Margaret Medellin, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1090-

Computing in Civil Engineering, 2 vols., Khozeimeh, ed., 1994, 0-7844-0026-1, 2275pp. 2 vols., Khalil Construction Problem Solving in a Cooperative Distributed Agent Environment, Barry Jones and Mike Riley, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1004, 270, 877.

1994), p79-87.

The Context-Oriented Model: An improved Modeling Approach for Representing and Processing Design Standards, Han Kiliccote, James H. Garrett, Jr., Thomas J. Chmielenski and Kent A. Reed, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p145-1994.

Coupled Lake Erie Air-Sea, Storm Resolving Forecasts and Predictions, the Viento Project, John G. W. Kelley, Chieh-Cheng J. Yen, Keith W. Bedford, Jay S. Hobgood and David J. Schwab, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p202-215.

Coupled Mass-Transport and Chemical-Equilibrium Modelling of Bronze Disease, M. B. McNeil and J. C. Walton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p1014-1019.

Data Needs for Evolving Motor Vehicle Emission Modeling Approaches, Randall Guensler, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p167-196.

Deductive Databases in Engineering, Sivand Lakmazaheri, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p806-813.

- Design Aspects of Modeling Reclaimed Water Use, Michael G. Heyl, David K. Ammerman and Jeffrey F. Payne, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p698-701.
- Determination of Watershed Features for Surface Runoff Models, N. K. Garg and D. J. Sen, HY Apr. 94, p427-447.
- Development of a Model for the ABF/AS Process, Julian Sandino and Ross E. McKinney, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p686-693.
- Development of an Experimental Watershed for Testing Nonpoint Source Pollution from Urban Runoff, Vassilios A. Tsihrintzis, Hector R. Fuentes and Rizwan Hamid, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1237-1241.
- Development of Long-Term Three-Dimensional Hydrodynamics in Long Island Sound for Use in Water Quality Modeling, Richard A. Schmalz, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1316-1320.

Developments to the IRMA Model of AEC Projects, Thomas Froese, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p778-785.

Directional Wave Data - Measurements and Modeling Coast of Florida Erosion and Storm Effects Study, Thomas D. Smith and Jon M. Hubertz, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p76-89.

Discrete Modeling of Soil-Structure Interaction Under Dy-

namic Loading, Grzegorz Bak, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p873-876.

Dynamic Behavior of Slant-Legged Rigid Frame Highway Bridge, Ton-Lo Wang, Dongzhou Huang and Mohsen Shahawy, ST Mar. 94, p885-902.

Dynamic-Behavior Modeler for Material Handling in Construction, Yvan J. Beliveau and Taylan Dal, CP July 94, p269-285.

East River Modeling of Water Quality for Multiple-Project Assessments, Guy Apicella, Robert Norris, Johanna Newton, Walter Ewald and Angelika Forndran, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed. Rajbud Cheng, ed. and Craig Swanson, ed., 1994), p235-248.

Effectiveness of Storm Shutters in Hurricane Damage Prevention, Raja R. A. Issa, Camille A. Issa, Ajay Shanker and Paul Gencorelli, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p486-495.

Enhancing Nuclear Waste Disposal Safety by Exploiting Regional Groundwater Flow—An Exploratory Proposition, József Tóth and Grant Sheng, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p.1797-1804.Environmental Modeling of Coastal Wetlands, Lisa C.

Environmental Modeling of Coastal Wetlands, Lisa C. Roig and Robert A. Evans, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swan-

son, ed., 1994), p522-535.

EPA's Environmental Monitoring and Assessment Program: Availability of Broad-Scale Environmental Data and Opportunities for Use in Environmental Modeling Applications, Richard W. Latimer, John F. Paul and Jeffrey S. Rosen, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p509-521.

Error Evaluation of Three Random-Field Generators, Gor-

don A. Fenton, EM Dec. 94, p2478-2497.

Estimation of Design Surge Heights by Utilizing Meteorologic and Oceanographic Data, Jahir Uddin Chowdhury and A. K. M. Tareque, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p918-922.

Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994, 0-87262-

975-9, 696рр.

Evaluation and Control of Collapsible Soils, Adnan A. Basma and Erdil R. Tuncer, GT Oct. 92, p1491-1504.

Evaluation of Supercritical/Subcritical Flows in High-Gradient Channel, Douglas J. Trieste, HY Aug. 92, p1107-1118.

Experimental Data and Modeling for Surfactant Micelles, HOCs, and Soil, David A. Edwards, Zhongbao Liu and Richard G. Luthy, EE Jan./Feb. 94, p23-41.

Expert Analysis in Regulated Irrigation Canal Modelling, Forrest M. Holly, Jr. and John P. Parrish, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p92-96.

Fate/Transport Modeling and Remediation of Contaminated Plume at Vance Airforce Base, Avdhesh K. Tyagi and Sharon H. Carpenter, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p287-292.

A Field and Modeling Study of Residual Circulation in Sarasota Bay and Tampa Bay, Florida, Y. P. Sheng and S. J. Peene, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p641-655.

Field Evaluation of the Sediment Transport Model "Stream" with a Bank Erosion Component, Deva K. Borah and Mona S. Dashputre, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p979-983.

Field Test of Stormwater Best Management Practices, S. L. Yu, S. L. Barnes, R. J. Kaighn, Jr. and S. L. Liao, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p508-515.

Filling of Pipelines with Undulating Profiles, Chyr Pyng Liou and William A. Hunt, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p104-118.

Finite Element Modeling of Continuous Posttensioned Voided Slab Bridges, Rajan Sen, Mohsen Issa, Xianghong Sun and Antoine Gerges, ST Feb. 94, p651-667.

Fitting Beta Distributions Based on Sample Data, Simaan M. AbouRizk, Daniel W. Halpin and James R. Wilson, CO June 94, p288-305.

Flexural Strength of Fiber Cementitious Composites, Mohamed Maalej and Victor C. Li, MT Aug. 94, p390-406

Flow and Chloride Transport in the Tidal Hudson River, NY, Lawrence A. Weiss, Raymond W. Schaffranek and M. Peter de Vries, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1300-1305. Functional Analysis of the Envelope Design Process for Integrated Building Design, Hugues Rivard, Claude Bédard, Kinh H. Ha and Paul Fazio, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p71-78.

General Urban Runoff Model for Water Quality Investiga-tions, Robert E. Pitt, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p1213-1218.

Genetic Algorithms and Neural Networks: Do Pluralized Techniques Hold Any Advantages for Designing Groundwater Quality Assurance Systems? J. Wayland Eheart, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p258-261.

Genetic Algorithms in Groundwater Management, L. Srinivasa Reddy, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

p293-297.

- GIS Application for Floodplain Analysis and Mapping, David J. Greenwood, Ramzi K. Bannura and Myles E. Powers, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p232-
- Graphical Network Model Simplifies Water Analysis, Michael D. Larkin, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p296-
- Heat Transfer Effects in Vertically Emplaced High Level Nuclear Waste Container, Samir F. Moujaes and Yao M. Lei, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p816-822.
- Heat Transfer Modeling in Burial Sites Containing Heat-Generating Waste, Mohamed Alsharif, Iqbal Ahmed and Paul Dickman, (High Level Radioactive Waste Manage-ment, High Level Radioactive Waste Program Committee, 1994), p899-906.

High-Strain Kinetic Testing of Deep Foundations, Alain E. Holeyman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p934-939.

- Historical Rainfall-Runoff Analysis Using the Antecedent Precipitation Index, B. J. Doeing, R. A. Gaines and T. M. James, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1095-
- Household Hazardous Wastes—Discard Patterns and Man-agement Options, Chris Zeiss, UP June 94, p87-103.
- How Can a Radioactive Waste Disposal Facility Achieve Compliance with RCRA? Ruth F. Weiner, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1525-1531.

How to Organize CADD Systems (Part 2), CC Mar. 94,

Hydraulic Residence Time of CSTRs under Unsteady-State Condition, Jian Peng, EE Nov./Dec. 94, p1446-1458

Hydrodynamic Behavior of Compound Rectangular Open Channels, Dan Naot, Iehisa Nezu and Hiroji Nakagawa, HY Mar. 93, p390-408.

Improved Thermal Source Term Generation Capability for Use in Performance Assessment and System Studies, John King and Carol Rhodes, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p627-633.

In Situ Treatment of VOCs by Recirculation Technologies, O. F. Webb, R. L. Siegrist, M. R. Ally, W. E. Sanford, P. M. Kearl and J. L. Zutman, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p572-579.

Integrated Automation Systems in Structural Engineering, Song Fong Jan, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p1318-1325.

Integrated Design-Process Model, Victor E. Sanvido and Kevin J. Norton, ME Sept./Oct. 94, p55-62.

Integrated Geology and Preliminary Cross Section Along the North Ramp of the Exploratory Studies Facility, Yucca Mountain, D. C. Buesch, R. P. Dickerson, R. M. Drake and R. W. Spengler, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1055-1065.

Integrated Modelling of Near Field and Engineered Barrier System Processes, Alan Lamont and James Gansemer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1195-1201.

An Integrated Shell (ROSS3) for Transport Modeling, Visualization, and Data Management, Keerthisiri S. Angam-mana, Poojitha D. Yapa and Hung Tao Shen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p150-154.

Integrated Spacecraft Environments Model (ISEM), Ray Rantanen and Tim Gordon, (Engineering, Construction,

nan Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p609-617. Interpretive and Modelling Problems of Risk and Uncertainty in Bidding Techniques, David Eaton, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2038-2045

Kent, Edward, John Richardson and Vijay Panchang, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p56-60.

Long-Term Simulation of Decreased Acid Loading on For-ested Watershed, Todd H. Rees and Jerald L. Schnoor,

EE Mar./Apr. 94, p291-312

Lumped Mass Modelling for the Dynamic Analysis of Air-craft Structures, Elias G. Abu-Saba, Ji-Yao Shen and William M. McGinley, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p124-134.

Macro-Roughness Effects on Stream Reaeration, Douglas B. Moog and Gerhard H. Jirka, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p994-998.

Measuring and Modeling Chlorine Propagation in Water Distribution Systems, Robert M. Clark, Walter M. Grayman, James A. Goodrich, Rolf A. Deininger and Kenneth Skov, WR Nov./Dec. 94, p871-887.

Mechanism of Biological Treatment in Plug-Flow or Batch Systems, Hasan Ali San, EE July/Aug. 92, p614-628.

A Membrane Structure for a Lunar Assembly Building, Mark E. Schroeder and Philip J. Richter, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p186-195.

Mesh Generation for Estuarine Flow Modeling, Norman L. Jones and David R. Richards, WW Nov./Dec. 92, p599-

Metamodeling Approach for Approximating the Operating Characteristics of Series of G/G/1 Queues on Congested Waterways, Melody, D. M. Dai and Paul Schonfeld, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p490-497.

Minimizing the Probable Maximum Flood, Mark A. Wood-bury, Douglas T. Eberlein and Nicholas Pansic, CE June

94, p64-65.

Mixing by Shear Instabilities of the Longshore Current, J. C. Church, E. B. Thornton and J. Oltman-Shay, (*Coastal Dynamics '94*, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p376-390.

Modeling a Ponded Infiltration Experiment at Yucca Moultain, NV, David B. Hudson, Alan L. Flint and Wil-liam R. Guertal, (High Level Radioactive Waste Man-agement, High Level Radioactive Waste Program Com-mittee, 1994), p.2168-2174.

Modeling Circulation and Salinity Transport in the Indian River Lagoon, M. Z. Moustafa and J. M. Hamrick, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p381-395.

Modeling Engineering Design Information: An Object-Centered Approach, M. Maher Hakim and James H. Gar-rett, Jr., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p563-570.

Modeling Flow in Variably-Saturated Porous Media, S. P. Shrestha and G. V. Loganathan, (Water Policy and Man-agement: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p429-432.

Modeling Fracture in Cemented Granular Materials, B. C. Trent and L. G. Margolin, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p54-69.

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Modeling Heavy Metal (Cadmium) Uptake by Soil-Plant Root System, Sandhya Rao and Shashi Mathur, IR Jan./ Feb. 94, p89-96.

Modeling Heretogeneous Unsaturated Porous Media Flow at Yucca Mountain, Thomas H. Robey, (High Level Radioactive Waste Management, High Level Radioactive

Waste Program Committee, 1994), p2678-2684.

Modeling Hydrologic and Pollutant Transport Processes for Stromwater Runoff to Surface Waters, Leslie L. Shoemaker, Mohammed Lahlou, Andrew Stoddard and James Pagenkopf, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1208-1212.

Modeling Impact of Armour Blocks, M. A. G. Silva, (Reconstruction of the West Breakwater at Port Sines, Por-tugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p187-204.

Modeling Infiltration Into a Tuff Matrix From a Saturated Vertical Fracture, Clifford K. Ho, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1897-1904.

Modeling Issues of Copper Solubility in Drinking Water, Michael R. Schock, Darren A. Lytle and Jonathan A. Clement, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p17-25.

Modeling Kinetics of Sediment Removal in Water Columns, P. L. Shrestha, R. S. Govindaraju and G. T. Orlob, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1065-1069.

Modeling of Chemical Inhibition of Nitrification, Robert W. Okey and H. David Stensel, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p297-304.

Modeling of Deep Water Outfall Plumes in the East Australian Coastal Ocean, Ian P. King, William L. Peirson and Bruce A. Cathers, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p71-85.

Modeling of Fiber Pullout in Cement Based Composites Using an R-Curve Approach, B. Mobasher and C. Y. Li, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p559-566.

Modeling of GPS Systematic Errors in Monitoring and Control Surveys, Adam Chrzanowski and Yong-qi Chen, SU Nov. 94, p145-155.

Modeling of Maximum Velocity in Open-Channel Flow, Chao-Lin Chiu and Chairil A. Said, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p381-385.

Modeling Operational Activities in Object-Oriented Simulation, Amr A. Oloufa, CP Jan. 93, p94-106.

Modeling Pipe Networks Dominated by Junctions, Don J. Wood, L. Srinivasa Reddy and J. E. Funk, HY Aug. 93, p949-958.

Modeling Pollutant Fate and Transport in Constructed Wetlands, Russell T. Brown, Joanne Field, Michael J. Zanoli and Ron W. Crites, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p532-539.

Modeling Regional Flow and Flow to Drains, G. M. Pohll and J. C. Guitjens, IR Sept./Oct. 94, p925-939.

Modeling Settlements of an Existing Municipal Solid Waste Landfill Sideslope Using an Earthen Surcharge Pile, William L. Deutsch, Jr., Owen R. Esterly and John Vitale, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1135-1148.

Modeling the Seasonal Circulation in Massachusetts Bay, Richard P. Signell, Harry L. Jenter and Alan F. Blum-berg, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p578-

Modeling to Generate Alternatives in Discrete Structural Optimization, John W. Baugh, Jr., E. Downey Brill, Jr. and Shannon C. Caldwell, (Computing in Civil Engi-neering, Khalil Khozeimeh, ed., 1994), p310-317.

Modeling Viscoelastic Behavior of Hot Mix Asphalt (HMA) Using Discrete Element Methods, Jay Namunu Meegoda and K. George Chang, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p804-811.

Modeling Volatile Organic Contaminants' Fate in Waste-water Treatment Plants, H. Melcer, J. P. Bell, D. J. Thompson, C. M. Yendt, J. Kemp and P. Steel, EE May/

June 94, p588-609.

Modelling Large-Scale Coast Evolution, Zbigniew Pruszak and Ryszard B. Zeidler, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C.

Kraus, ed., 1994), p446-461. Modelling of Extended Endplate Bolted Connections, Mohammed R. Bahaari and Archibald N. Sherbourne, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p731-736.

Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994, 0-7844-0035-0, 375pp.

Modified Eddy Viscosity Model in Fully Developed Asymmetric Channel Flows, Whey-Fone Tsai and Robert Ettema, EM Apr. 94, p720-732.

Money-Saving Model, Carson Mettel, David McGraw and

Susanne Strater, CE Jan. 94, p54-56.

Movement of Colloids Under Hydraulic Gradients, Rao S. Govindaraju and Lakshmi N. Reddi, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p322-326.

Near Field Behavior of a Far Field Circulation Model, Xueyong Zhang, Eric Adams, Lan Blumberg, Z. G. Ji and Kirk Ziegler, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p155-159.

Neural Networks for River Flow Prediction, Nachimuthu

Karunanithi, William J. Grenney, Darrell Whitley and Ken Bovee, CP Apr. 94, p201-220. A New LAX-WENDROFF Algorithm to Solve the Bed Continuity Equation With Slope Effect, Jean-Michel Tanguy, Bainian Zhang and Luc Hamm, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p134-148.

New Methodology for Modeling Annual-Aircraft Emissions at Airports, B. Gordon Woodmansey and Judith G.

Patterson, TE May/June 94, p339-357.

New Methods for Modelling Dam-Break Wave, A. Paquier, (Medelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p229-240.

Newtonian Fluid Mechanics Treatment of Debris Flows and Avalanches, Bruce Hunt, HY Dec. 94, p1350-1363. Nonlinear Finite Element Analysis of RC Slab Bridge, Vikas Huria, Kuo-Liang Lee and A. Emin Aktan, ST Jan.

93, p88-107.

Nonlinear Finite-Element Model of Complete Light-Frame Wood Structures, Bohumil Kasal, Robert J. Leichti and Rafik Y. Itani, ST Jan. 94, p100-119.

Numerical Experiments on Instability in Unsteady Flow Modeling, Chin-lien Yen and Ming-hsi Hsu, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1275-1279. Object-Oriented Modeling of Design System for RC Build-

ings, Ziga Turk, Tatjana Isaković and Matej Fischinger,

CP Oct. 94, p436-453.

Optimum Curvature for Simple Horizontal Curves, Prianka N. Seneviratne and M. Nazrul Islam, TE Sept./Oct. 94, p773-786.

P-y Analysis of Laterally Loaded Piles in Clay Using DMT, M. A. Gabr, T. Lunne and J. J. Powell, GT May 94, p816-837.

A Peice-wise Linear Evaluation of Masonry Infills Subjected to Out-of-plane Seiesmic Drift, R. Craig Henderson, W. Dale Jones, E. G. Burdette and Max L. Porter, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p803-808.

Permeability Measurements for the Modelling of Wave Action On and In Porous Structures, Marcel R. A. van Gent, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p671Physical Modelling of Multidirectional Waves, A. M. Cornett, M. D. Miles and O. G. Nwogu, (Ocean Wave Meas-urement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p614-629.

A Physically-Based Model of Channel Widening, Stephen E. Darby and Colin R. Thorne, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p944-948.

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Postbuckling Behavior of Steel-Plate Shear Walls under Cyclic Loads, M. Elgaaly, V. Caccese and C. Du, ST Feb. 93, p588-605.

Predictability and Sensitivity of Groundwater Transport Models, Hector R. Fuentes and Vassilios A. Tsihrintzis, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p267-271.

Predicting Construction Contract Surety Bond Claims Using Contractor Financial Data, Gordon D. Severson, Jeffrey S. Russell and Edward J. Jaselskis, CO June 94,

Predicting TCM Responses with Urban Travel - Demand Models, Peter R. Stopher, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p59-75.

Problems of Stream Flood Simulation and Prediction, Shou-shan Fan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1110-

Process Model for Public Sector Design-Build Planning, Anthony D. Songer, C. William Ibbs and Thomas R. Napier, CO Dec. 94, p857-874.

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A Real-Time Graphical Interface to a Two-Dimensional Groundwater Flow and Mass Transport Model, Robert C. Speake, Jr. and Kay S. Capps, (Computing in Civil Engineering, Khalii Khozeimeh, ed., 1994), p2081-

Reconstruction of Concentration Boundary Condition for Unsteady Pesticide Transport Modeling, Deborah J. Mossman and Nael Al Mulki, (*Hydraulic Engineering* '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p160-164.

Refinement of Cost Estimates with Artificial Neural Nets. Irtishad U. Ahmad and Syed T. Rahman, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

Reusable Water Exhange Modeling, John R. Clark and John N. Winchester, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p738-741.

Scour Hole Depth Downstream of the SAF stilling Basin, M. Shafai-Bajestan, A. Sayahi and M. L. Albertson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1045-1049.

Sediment Modeling in the Rio Grande Conveyance Channel, Drew C. Baird and Cassie C. Klumpp, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1151-1155.

Seismic Analysis of Bridges: Simplified or Refined Approach, Y. Chen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p79-84.

Simulated Circulation and Transport in Adjacent Wind-Driven Estuaries in North Carolina, Jeanne C. Robbins and Jerad D. Bales, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p105-118.

Simulation of Flushing in Indian River Lagoon Using 1-D and 3-D Models, Y. P. Sheng, H. K. Lee and C. E. Demas, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p366-380

Simulation of Learning Development in Repetitive Con-struction, James D. Lutz, Daniel W. Halpin and James R. Wilson, CO Dec. 94, p753-773.

Site Characterization by Artificial Neural Networks, Donna M. Rizzo, David E. Dougherty and Theodore P. Lillys, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

Source-Receptor Modeling of PAHs Using Deposition Levels in Winter-Long Urban Snowpack, M. Sharma, E. McBean, N. Thomson and J. Marsalek, EE Sept./Oct. 94,

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Spatially Averaged Conservation Equations for Interacting Rill-Interrill Area Overland Flows, Gokmen Tayfur and M. Levent Kavvas, HY Dec. 94, p1426-1448.

Spectral Boussinesq Modelling of Breaking Waves, J. A. Battjes, Y. Eldeberky and Y. Won, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p813-820.

Static Behavior of Pultruded GFRP Sections, Hota V. S. GangaRao and V. Nagaraj, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994),

p844-848.

Strength Variability of Wood Formwork Members, Saeed Karshenas, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p526-531.

Structure Modelization Using Expert Elements 'Neural Stiffness Method', Ricardo Barrenechea, Fabián Calcagno and Guillermo Gulli, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p676-683.

Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994, 0-87262-914-7, 237pp.

Two New Methods of Fictitious-Crack Model and Their Applications, Yuan N. Li, Michael Müller and J.-D. Wörner, EM Dec. 94, p2604-2620.

Unsaturated Flow Modeling—Exact Solution to Approximate Problem? Lakshmi N. Reddi and Sampath K. R.

Danda, WR Mar./Apr. 94, p186-198.

Urban Drainage Rehabilitation Programs and Techniques, Edited by William A. Macaitis, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994, 0-7844-0038-5, 223pp.

Validation of a Continental-Scale Storm Surge Model for the Coast of Delaware, David J. Mark and Norman W. Scheffner, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p249-263.

Volterra Models of Ocean Structures: Extreme and Fatigue Reliability, S. R. Winterstein, T. C. Ude and T. Marthinsen, EM June 94, p1369-1385.

Where do the Arrows Come From? Evaluating Structural Loads, Duane S. Ellifritt, (Structures Congress XII, N. C Baker, ed. and Barry J. Loodno, ed., 1994), p1364-1368.

Why Design Storm Methods Have Become Unethical, William James, (Hydraulic Engineering '94, George Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1203-

Models

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About the Range of Validity of Different Spectral Models for Wind-Generated Gravity Waves, Rodríguez R. Germán and Q. José Jiménez, (*Coastal Dynamics '94*, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p755-769.

Above and Below Boiling Thermal Loading Strategies for Large Waste Packages, Marvin L. Smith, (High Level Radioactive Waste Management, High Level Radioac-tive Waste Program Committee, 1994), p2146-2151.

Air Concentration Measurements in Highly-Turbulent Flow on a Steeply-Sloping Chute, James F. Ruff and Kathleen H. Frizell, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p999-1003.

Air Permeability from Pneumatic Tests in Oxidized Till, Kenneth B. Edwards and LaDon C. Jones, EE Mar./Apr. 94, p329-347.

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Analysis of Earthquake Fault Rupture Propagation through Cohesive Soil, Jonathan D. Bray, Raymond B. Seed and H. Bolton Seed, GT Mar. 94, p562-580.

Analytical Approach to Collapse Mechanisms of Circular Masonry Arch, Carlo Blasi and Paolo Foraboschi, ST Aug. 94, p2288-2309.

Application of a Parametric Long Term Model Concept to the Delray Beach Nourishment Program, Michele Capobianco, Huib J. De Vriend, Robert J. Nicholls and Mar-cel J. F. Stive, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p391-401.

Application of the "Diflupress L.D." Field Test to Settlement Calculation, C. Leidwanger, E. Flavigny, R. Cham-bon, J. L. Giafferi, P. Catel and G. Bufi, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guv Y. Félio, ed.,

1994), p1312-1324.

Applications of Large Domain Hydrodynamic Models to Generate Frequency-of-Occurrence Relationships, Norman W. Scheffner, Leon E. Borgman and David J. Mark, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p264-

Assembly of Simulation Networks Using Designs, Plans, and Methods, I. D. Tommelein, R. I. Carr and A. M.

Odeh, CO Dec. 94, p796-815.

Assessment of Distress Models for Prediction of Pavement Service Life, Dar-Hao Chen, Musharraf Zaman and Joakim G. Laguros, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1073-

Atmospheric Transport Prediction Using an Adaptive Finite Element Method, Darrell W. Pepper and Ashley F. Emery, (High Level Radioactive Waste Management. High Level Radioactive Waste Program Committee, 1994), p1946-1952.

An Attempt of an Aquifer Model with Lack of Data, Octavio Cabezut-Boo, Ricardo Anza and Luis Tubilla, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p312-316.

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Breakout Session 3A: Interfacing with Emission Models, Greig Harvey, Ron Kirby, Keith Lawton, Michael Reoreig Harvey, Roll Kilby, Actul Lawton, Indicate Re-plogle and Leonard Seitz, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p147-150. Breakout Session 4A: VMT Estimation, Julian Benjamin,

Charles Crevo and Samual Lawton, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed.,

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Hutton and Francis I. Chung, WR Jan./Feb. 94, p1-16.

Chemical Inactivation of Cryptosporidium Parvum in Drinking Water, Gordon R. Finch and E. Kathleen Black, (Critical Issues in Water and Wastewater Treat-ment, Joseph N. Ryan, ed. and Mare Edwards, ed.,

1994), p42-49.
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Circle Integration, John Kunz, Mark Clayton and Martin Fischer, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p55-62.

Combination of an Automated Channel Network Extracting System and a Distributed Watershed Model in Estimation Rainfall-Runoff Processes, Ray-Shyan Wu, Yi-Shao Lai and Cheng-Hsung Liu, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p356-360.

Comparison of Models for Subsurface Drainage in Flat and Sloping Lands, E. Lorre, B. Lesaffre and R. W. Skaggs, IR Mar./Apr. 94, p266-277.

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Comparison of Two different Models of a Shell Roof, Oscar A. Andrés, Néstor F. Ortega and Carlos A. Schiratti, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p320-329.

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Computational Discretization Effect on Rainfall-Runoff Simulation, Edward Mazion, Jr. and Ben Chie Yen, WR

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Computer Aided Design of Trickling Filters, Bruce E. Logan, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p678-685.

Cone Models for Embedded Foundation, Jethro W. Meek and John P. Wolf, GT Jan. 94, p60-80.

Confirmation of MRS/MPC Transfer Facility Sizing Using Simulation Modeling, E. Scott Houston and Jennifer D. Hadley, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1387-1392.

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Jr., AS Oct. 94, p435-445. Convergence Rates of the Method of Successive Elastic Solutions in Thermoplastic Problems of a Layered Concentric Cylinder, Todd O. Williams and Marek-Jerzy Pindera, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p348-357.

Correlating Trihalomethane Data, Paul H. Hutton and Francis I. Chung, EE Jan./Feb. 94, p219-241.

A Coupled Mass Transfer and Surface Complexation Model for Uranium (VI) Removal from Wastewaters, John Lenhart, Linda A. Figueroa and Bruce D. Honeyman, (Critical Issues in Water and Wastewater Treat-ment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p249-256.

Creep Analysis of Composite Steel-Concrete Members with Deformable Connectors, F. Mola, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p737-742.

Cyclic Axial Loading of Drilled Shafts in Cohesive Soil, Kevin J. McManus and Fred H. Kulhawy, GT Sept. 94, p1481-1497.

Daily Procedure for GLFS Nowcasts, Chieh-Cheng J. Yen, John G. W. Kelley and Keith W. Bedford, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p202-206.

Damage Tolerance Analysis in Structural Rehabilitation, Charles J. Hookham, (Analysis and Computation, Frank-

lin Y. Cheng, ed., 1994), p94-103.

Deformations in Granular Soils Due to Cyclic Loading, P. M. Byrne and J. McIntyre, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1864-1896.

Depositional Turbidity Currents Laden with Poorly Sorted Sediment, Marcelo H. Garcia, HY Nov. 94, p1240-1263.

Detailed Characterization and Preliminary Adsorption Model for Materials for an Intermediate-Scale Reactive-Transport Experiment, David B. Ward, Charles R. Bryan and Malcolm D. Siegel, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2048-2062.

Development and Feasibility of a Waste Package Coupled Reactive Transport Model (AREST-CT), David W. Engel, B. Pete McGrail, James A. Fort and Janet S. Roberts, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1214-1221.

Development of Bridge Live Load Models, John M. Kulicki, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p532-537.

Development of Fisheries Models for the Missouri River System, Mark Harberg, Doug Latka, Tom Cole, John Nestler and Gene Ploskey, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and

Harry N. Tuvel, ed., 1994), p742-745.

Diffusion Hydrodynamic Model of Shallow Estuary, G. L. Guymon, M. N. Khan, M. Collins and T. V. Hromadka,

WR Mar./Apr. 94, p253-266.

Distributed Flexibility Models for Nonlinear Analysis of RC Structures, Sashi K. Kunnath, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p145-154.

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Earthquake Fault Rupture Propagation Through Soil, Jonathan D. Bray, Raymond B. Seed, Lloyd S. Cluff and H. Bolton Seed, GT Mar. 94, p543-561.

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G. D. Hahn, (Structures Congress XII, N. C. Baker, ed.

and Barry J. Loodno, ed., 1994), p1478-1483.
Efficacy of ARC/INFO GIS Application to Hydrologic Modeling, J. J. Warwick and S. J. Haness, WR May/June 94, p366-381.

94, p.506-581.
An Energy Based Model for Coastal Bays and Lakes, William S. Appleton, William L. Wood and Yan-Sheng Chang, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), eds. 553 p565-577.

Engineering of the Building Envelope "To Do Or Not To Do", Norris Stubbs and Dale C. Perry, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994),

p10-30.

Equivalent Continuum Model for Deployable Flat Lattice Structures, Charis Gantes, Jerome J. Connor and Robert D. Logcher, AS Jan. 94, p72-91.

Estimating Annual Urban Nonpoint Pollutant Loads, Robert D. Chandler, ME Nov./Dec. 94, p50-59.

Estimating Toxicity of Organic Chemicals to Activated-Sludge Microorganisms, B. Sun, N. Nirmalakhandan, E. Hall, X. H. Wang, J. Prakash and R. Maynes, EE Nov./ Dec. 94, p1459-1469.

Evolution of Breaking Directional Spectral Waves in the Nearshore Zone, H. Tuba Ozkan and James T. Kirby, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p849-863

Experimental Verification of Beam Models for RC, Toshikatsu Ichinose and Katsuki Takiguchi, ST Aug. 94,

Fine-Grained Sediment Transport in Pawtuxet River, Rhode Island, C. Kirk Ziegler and Bradley Nisbet, HY May 94, p561-576.

A Flexible Structural Analysis Method for Computer-Aided Preliminary Design, Fang Zhao and Xiaogang Zeng, (Computing in Civil Engineering, Khalil Zeng, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1294-1301. Further Development of a Source Term Model for a Repos-

itory in Unsaturated Tuff, Richard Codell and Richard Weller, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p477-484.

GIS-Based Channel Extraction and Smoothing Algorithm for Distributed Hydrologic Modeling, Fred L. Ogden, Bahram Saghafian and Witold F. Krajewski, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p237-241.

GLFSVIEW - GLFS Product Viewing Application, Yi-Fei P. Chu, Chieh-Cheng J. Yen and Keith W. Bedford, (Hy-draulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p207-211.

Graphical-Based Productivity Transient Investigation Using DISCO, Rong-Yau Huang and Jorge A. Vanegas, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p1-8.

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The Great Lakes Forecasting System: An Overview, Keith W. Bedford and David J. Schwab, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p197-201.

A High Level and Real Time Integration Approach for CAD Systems, Mustafa Alshawi, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1779-

Highway and Interline Transportation Routing Models, David S. Joy and Paul E. Johnson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1263-1269.

Historical and Enhanced Edwards Aquifer Recharge, Samuel K. Vaugh, Kelly J. Kaatz and Kenneth L. Choffel, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p380-383.

How Should the Migration and Retardation of Colloids be Characterized? Peter Grindrod, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2709-2718.

Hydraulics of Seawater Purging in Tunneled Wastewater Outfall, E. Eric Adams, Dipak Sahoo, Christopher R. Liro and Xueyong Zhang, HY Feb. 94, p209-226.

Identifying Significant Uncertainties in Thermally Dependent Processes for Repository Performance Analysis, James D. Gansemer and Alan Lamont, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2197-2206.

Immiscible Organic Liquid Recovery Using Unconfined Membranes, Leonard Jewell and Michael J. Semmens, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p90-

Impact Factors for Simple-Span Highway Girder Bridges, Dongil Chang and Heehyun Lee, ST Mar. 94, p704-715.

Implementation and Validation of a Global Third-Generation Wave Model at Fleet Numerical Oceanography Center, Paul A. Wittmann and R. Michael Clancy, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p406-

Improved Hydraulic Features of the HEC River Analysis (HEC-RAS), Gary W. Brunner and Steven S. Piper, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p502-506.

In Situ Photothermal Deflection Spectroscopy of Uranium Dioxide Dissolution, James D. Rudnicki, Richard E. Russo and David W. Shoesmith, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2609-2615.

Innovative Instrumentation for a Physical Model of River Ice Transport, Johannes Larsen, Jon E. Zufelt and Randy D. Crissman, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p259-267.

Integrated Analytical Procedure for Concrete Slabs Under Impact Loads, Ayaho Miyamoto, Michael William King and Manabu Fujii, ST June 94, p1685-1702.

Integration of Water Quantity and Quality in River Basin Network Flow Modeling, John W. Labadie, Darrell G. Fontane and Tewai Dai, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p61-64.

Integration of Water Resource Models and GIS for Water Resource Management, Roger T. Kilgore, Joseph S. Krolak and Michael Walsh, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p37-40.

Integration of Water Rights and Network Flow Modeling in the Upper Snake River Basin, Donald K. Frevert, John W. Labadie, Roger K. Larson and Nancy L. Parker, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p577

Intermediate Support Cable Logging Systems, James W. Charland, Alan G. Hernried and Marvin R. Pyles, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994),

p791-800.

Investigation of Faulted Tunnel Models by Combined Photoelasticity and Finite Element Analysis, Samaan G. Lad-kany and Yuping Huang, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1979-1986.

IPA Phase 2 and NRC's HLWM Regulatory Program, Nor-Ariase 2 and Nec 8 iLWM regulatory Program, Norman A. Eisenberg, Rex G. Wescott, Margaret V. Federline, Mel Silberberg and Budhi Sagar, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1451-1460.

Is Bedform Development Chaotic? César Mendoza Cabrales, (Hydraulic Engineering '94, George V Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p78-81.

A Lagrangian Model for Surface Buoyant Jets, Maneesha Joshi and J. F. Atkinson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

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- Linking Hydrodynamic and Biogeochemical Transport
 Models for Estuarine and Coastal Waters, J. M. Hamrick,
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Modeling of Interaction of Small Particulates in Earth Orbit, Anthony F. Beverina and Christopher A. Dobosz, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed.,

1994), p597-608.

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- Existing Sewer Evaluation and Rehabilitation, Second Edi-Second edition (M&R No. 62), Joint Task Force of the Water Environment Federation and the American Society of Civil Engineers, (B. Jay Schrock, chmn.), 1994, 0-7844-0049-0, 270pp.
- Field Performance of an Acoustic Scour-Depth Monitoring System, Robert R. Mason, Jr. and D. Max Sheppard, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p366-375.
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- A Gas Sampling System for Withdrawing Humid Gases From Deep Boreholes, Joseph P. Rousseau, William Thordarson and Mark A. Kurzmack, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2139-2145.

How Many Observation Wells Does it Take to Find a Groundwater Contamination Plume? Bruce R. James and Steven M. Gorelick, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p197-199.

Hurricane Andrew's Effect on Manufactured Housing, Mike Mafi, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p158-165.

Hydro Plant Research Data Acquisition System, James E. Donegan, Julia Crittenden Tarbell and John F. Doyle, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p477-481.

Implementing a National Wave Monitoring Network-Some Lessons and Plans, David D. McGehee and J. Michael Hemsley, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p208-222.

Incineratior Emissions Monitor Offers Air-Compliance

Proof, ET Aug./Sept. 94, p7.

Instrumentation Needs and Possibilities: A Dialogue Between Suppliers and Users, Robert Ettema and Vito Latkovitch, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p539-540.

Integrated Environmental Monitoring Dredging Projects in the Netherlands, Thomas Arts and Andre Kok, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1370-1379.

Joint Optimization of Groundwater Remediation and Monitoring, Peter K. Kitanidis and Sang-Il Lee, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p525-528.

Kumar, Prasanna N. Jeffrey R. Williams, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1365-1371.

Long-Term Monitoring of Civil Structures using Smart Structures Techniques, T. Russell Gentry, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1392-1402.

Low-Cost Bridge Scour Measurements, J. D. Schall, J. R. Richardson and G. R. Price, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p114-118.

Modeling of GPS Systematic Errors in Monitoring and

Control Surveys, Adam Chrzanowski and Yong-qi Chen, SU Nov. 94, p145-155. Monitored Retrievable Storage (MRS) Facility Project Status, Ronald A. Milner, Victor W. Trebules and James B. Blandford, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Comi tee, 1994), p1358-1364.

Monitored Retrievable Storage/Multi-Purpose Canister Analysis: Simulation and Economics of Automation, Phil C. Bennett and Joe B. Stringer, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p363-369.

Monitoring and Predicting Corrosion of Weathering Steel, Richard D. Granata, James C. Wilson and John W. Fisher, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1209-1216.

Monitoring Gravel Movement Using Radio Transmitters, Edward F. Chacho, Jr., William W. Emmett and Robert L. Burrows, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p785-

Monitoring of a dredging operation using innovative sediment tracing techniques, Jonathan Marsh, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1360-1369.

Monitoring of Structures During Repair of Underground Utilities, F. Dirk Heidbrink and John E. Pearson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p258-263.

Monitoring of Water Injection Dredging, Dredging Pollut-ed Sediment, W. G. Borst, Joh. G. S. Pennekamp, H. Goossens, A. Mullié, P. Verpalen, T. Arts, P. F. van Dreumel and W. D. Rokosch, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p896-905.

Monitoring Performance Indicators on Leased Hydraulic Cutterhead Dredges, William R. Chapman, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1315-1324.

Monitoring Petroleum Contamination in an Aquifer, Paramesh Anantharaman and Joseph C. Cataldo, (Hydraulic Engineering) '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p272-276.

Mulitvariate Geostatistical Design of Ground-Water Moni-toring Networks, Fethi Ben-Jermaa, Miguel A. Mariño and Hugo A. Loaiciga, WR July/Aug 94, p505-522. New Techniques for Experimental Studies for Dredged

Material Dispersion, Philip J. W. Roberts, Adrian Ferrier and B. H. Johnson, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1192-1200.

New Technology in Coastal Wave Monitoring, Richard Seymour, David Castel, David McGehee, Juliana Thomas and William O'Reilly, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael

Hemsley, ed., 1994), p105-123

The Nourtec Experiment of Terschelling: Process-Oriented Monitoring of a Shoreface Nourishment (1993-1996), P. Hoekstra, K. T. Houwman, A. Kroon, P. van Vessem and B. G. Ruessink, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p402-416.

P3 for Marinas, Parks & Recreation, Richard Milbrodt, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p180-186.

Performance of a Steel Tank Founded on a Marine Clay, H. Senapathy, J. R. Davie and L. W. Young, Jr., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p830-841.

Performance Summary of the Tanque Verde Project-Geogrid Reinforced Soil Retaining Walls, James G. Col-lin, Donald G. Bright and Ryan R. Berg, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p43-56.

Perspectives on Water Quality Regulation, J. David Holm, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed.,

1994), p145-154.

Planning, Assessing and Implementing Diagnostic Rehabil-itation Options, B. Jay Schrock, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Re-medial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p101-110.

Prediction of Low Level Vibration Induced Settlement, Dong-Soo Kim, Sergey Drabkin, Anatoly Rokhvarger and Debra Laefer, (Vertical and Horizontal Deforma-tions of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p806-817.

Preliminary Assessment of Potential Sites for a Monitored Retrievable Storage (MRS) Facility, Lois S. Smith, Thomas H. Rogers, Arthur Dailey and Jeffrey R. Williams, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1372-1379.

Puckette, Paul, Michael Tubman and Blair Brumley, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p86-95.

The Response of a Barred Coast to a Sequence of Storms, Felix C. J. Wolf, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p44-58

Restoration and Capping of Contaminated Sediments, Carl E. Stivers and Robert Sullivan, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1017-1026.

Sensors and Techniques for Structural Monitoring, R. D. Marshall, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1379-1384.

Settlement and Deformation Response of a Bridge Footing on a Sloped Fill, Guy Y. Félio and Gunther E. Bauer, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1071-1081.

Settlement of a 15-Meter Deep Fill Below a Building, Percy M. Wimberly, III, Samuel G. Mazzella and F. Barry Newman, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p398-416.

Settlement of Building Foundations on Clay Soil Caused by Evapotranspiration, Vincent Silvestri and Claudette Tabib, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1494-1504.

Settlement Predictions Using Piezocone, J. R. Davie, H. Senapathy and W. Murphy, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p818-829.

Silent Inspector - An Aid to Dredge Inspection, James Rosati, III and Timothy L. Welp, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p756-763.

Sines Breakwaters Monitoring Program, C. Pita, F. Abecasis and A. Fernandes, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p408-427.

Smart Highway to Monitor Traffic Loads and Climate, CE Feb. 94, p16-17.

Stack Emissions Monitor May Offer Compliance Proof, CE Dec. 94, p17.

A Thousand Points of Data, William Ronald Woods and Daniel Steven Krasno, CE June 94, p54-56.

U.S. Drinking-Water Regulations: Treatment Technologies and Cost, Benjamin W. Lykins, Jr. and Robert M. Clark, EE July/Aug. 94, p783-802.

Uncertainty Analysis of Dredge-Production Measurement and Calculation, Stephen H. Scott, WW Mar./Apr. 93,

p193-203.

Using Hydrophones to Monitor Prestressed Concrete Pipe for Reinforcing Wire Failures, Douglas J. Buchanan, Malin L. Jacobs and Fred A. Travers, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p212-225.

Vessel Positioning, Survey Controls and Dredge Monitoring Systems, George P. Bonner, Cary B. Cox, Barry W. McCleave and Monroe B. Savage, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p28-37.

Wanapum Dam Embankment Settlement Study, M. Gene Yow, Thomas R. Hollingsworth and David D. Moore, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p337-347.

Wave Monitoring in The Southern California Bight, W. C. O'Reilly, R. J. Seymour, R. T. Guza and D. Castel, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p448-

High-Wire Rehab for Historic Retaining Walls, CE Nov. 94, p14,16.

Relation Between Largest Known Flood Discharge and Elevation in Montana, Charles Parrett and Stephen R. Holnbeck, (Hydraulic Engineering '94, George Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p870-

Start-ups, CE Oct. 94, p8.

Monte Carlo method

Coastal Eutrophication and Temperature Variation, Jacques Ganoulis, Stilianos Rafailidis, Istvan Bogardi, Lucien Duckstein and Istvan Matyasovszky, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p317-330.

Evaluating Sensitivity of Hydraulic Control Optimization Models, David P. Ahlfeld and Jonathan D. Dombek, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

p185-188

Extreme Winds Estimation by 'Peaks Over Threshold' and Epochal Methods, J. L. Gross, N. A. Heckert, J. A. Lechner and E. Simiu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1472-1477.

Fast Monte Carlo Simulations and Safety Index Checking, A. Sellier and A. Mébarki, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p260-265.

Galerkin Sampling Method for Stochastic Mechanics Prob-lems, P. D. Spanos and B. A. Zeldin, EM May 94, p1091-1106.

Intercomparison of Extremal Wave Analysis Methods Using Numerically Simulated Data, Yoshimi Goda, Peter Hawkes, Etienne Mansard, Maria Jesus Martin, Martin Mathiesen, Eric Peltier, Edward Thompson and Gerbrant van Vledder, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p963-977.

Low-Flow Frequency Analysis with Censored Data, Chuck Kroll and Jery Stedinger, (Water Policy and Manage-ment: Solving the Problems, Darrell G. Fontane, ed. and

Harry N. Tuvel, ed., 1994), p786-789.

Methods for Risk and Reliability Analysis, Larry W. Mays, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p26-44.

Modeling Flow in Variably-Saturated Porous Media, S. P. Shrestha and G. V. Loganathan, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed.

and Harry N. Tuvel, ed., 1994), p429-432.

Modeling of Extreme Loading by 'Peaks Over Threshold'
Methods, J. L. Gross, N. A. Heckert, J. A. Lechner and E. Simiu, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p135-

Monte Carlo Simulation for Correlated Variables with Marginal Distributions, Che-Hao Chang, Yeou-Koung Tung and Jinn-Chuang Yang, HY Mar. 94, p313-331.

The MOUSE Uncertainty Analysis System, Albert J. Klee, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p372-379.

Parameter Estimation of Structures from Static Response. II: Numerical Simulation Studies, M. R. Banan, M. R. Banan and K. D. Hjelmstad, ST Nov. 94, p3259-3283.

A PC-Based Stochastic Project Scheduling and Costing Module, Kamalain K. Sha'ath and Gurdev Singh, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p9-16.

Probabilistic Modeling of Scheduling Uncertainty: Methods and Tools, Ali Touran, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p380-383.

Probabilistic Nonlocal Damage Model for Continua with Random Field Properties, J. Carmeliet and H. Hens, EM Oct. 94, p2013-2027.

Proposed Hurricane Wind Speeds for ASCE 7-95, Jon A. Peterka and Kishor Mehta, (Structures Congress XII, N. Baker, ed. and Barry J. Loodno, ed., 1994), p461-

Quantifying Flood Damage Uncertainty, David A. Moser, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p201-218.

Range Estimating -- User-Friendly Risk Analysis, Kevin M. Curran, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p47-54.

Superfund Decision Analysis in Presence of Uncertainty, Aaron A. Jennings, Neel Mehta and Sumeet Mohan, EE

Sept./Oct. 94, p1132-1150.

When and How Can You Specify a Probability Distribu-tion When You Don't Know Much? Yacov Y. Haimes, Timothy Barry and James H. Lambert, (Risk-Based De-cision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p19-25.

Stollanders Stollanders and Civic Monuments: The Commissioning, Design and Public Perception of Urban Infrastructure Projects, Anthony C. Webster, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1244-1249.

Adaptive Space Station Technologies and Systems for a Lunar Surface Return Mission, Larry Toups and Sam Ximenes, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p483-493.

Alternative Habitat Concepts for the First Lunar Outpost, Kriss Kennedy and Michael Roberts, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1020-1035.

- Analysis of Glass-Ceramic Production from Lunar Resources, W. H. Poisl, B. D. Fabes, D. Allen, S. Hawley and A. Carpenter, (Engineering, Construction, and Operations in Space IV. Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994, p.1278-1287.
- Atmospheric Pressure within Lunar Structure, Paul S. Nowak, Jeffrey Janakus and Charles E. Mitchell, AS Oct. 94, p398-410.
- Braced Double Skinned Structure in Lunar Application, Hamid R. Adib-Jahromi, Ramesh B. Malla and Michael A. Accorsi, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p47-56.
- Cable-Based Lunar Transportation System, Leonhard E. Bernold, AS Jan. 94, p1-16.
- Carbon Formation Theory for Space Oxygen Processes, Peter E. Nolan, Andrew Hall Cutler and David C. Lynch, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1199-1209.
- The Challenge of Mining He-3 on the Lunar Surface: How All the Parts Fit Together, Igor N. Sviatoslavsky, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p668-677.
- Compaction of Lunar-Type Soil, Leonhard E. Bernold, AS Apr. 94, p175-187.
- Considerations for Design Criteria for Lunar Structures, Eric P. Steinberg and William Bulleit, AS Apr. 94, p188-198.
- Construction of a Lunar Base, Dave Torres, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p799-803.
- Construction of Large Lunar Structures by Fusion Welding of Sintered Regolith, R. S. Crockett, B. D. Fabes, T. Nakamura and C. L. Senior, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1116-1127.
- Design and Construction of Shielded Lunar Outpost, S. D. Jolly, J. Happel and S. Sture, AS Oct. 94, p417-434.
- Design Criteria for Lunar Construction Equipment, John V. Gies, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1237-1255.
- Design Techniques for Rectangular Lunar Modules, Mark E. Schroeder, Philip J. Richter and Jim Day, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p176-185.
- Development of a High Resolution Spectrometer for Measuring the Near-Earth RFI Environment: The First Auto-Correlator in Space, Namir E. Kassim, Kurt W. Weiler and Andrew W. Clegg, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1410-1421.
- Development, Testing and Modeling of Ceramic Composites for Lunar Applications, János C. Tóth and Chandra S. Desai, *(Engineering, Construction, and Operations in Space IV*, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p358-367.
- A Discussion of Nuclear Propulsion in Space Travel, Jeff Mitchell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p756-760.
- Distributional Information for Ejection Fragments, Eric P. Steinberg, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p402-413.
- Drivetrain Design, Incorporating Redundancy, for an Autonomous Walking Robot, Gerald P. Roston and Kevin Dowling, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p184-
- Dust Levitation on the Moon, Frederick A. Slane, Nebojsa Duric and Jack O. Burns, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p897-906.

- Effects of Dust and Thermal Cycling on Telescope Mirror Performance, Koon Meng Chua, R. Eric Pease and Stewart W. Johnson, (Engineering, Construction, and Operations in Space V, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p916-932.
- Efficient Path Planning Strategies for Unmanned Rover Vehicles, Kevin K. Gifford and George W. Morgenthaler, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1288-1308.
- Enabler Chassis Features and Mobiltiy Analysis, James S. Hollinger, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Faul R. Klarer, ed., 1994), p210-219.
- Energy Analysis of High Temperature Lunar Manufacturing Processes, Belinda Wong-Swanson and Rocco Fazzolari, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p697-707.
- Engineering Implications of Levitating Lunar Dust, Frederick A. Slane, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), pl 097-1105.
- Engineering, Construction, and Operations in Space IV, 2 vols, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994, 0-87262-937-6, 1560pp.
- Feasibility of Dual Technology in Manufacturing Lunar Concrete, Mohsen A. Issa and Husam A. Omar, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p933-941.
- For the Realization of Lunar Concrete, Hiroshi Kanamori, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p942-951.
- Foundation Slab for Lunar Base Construction, Mikiya Okumura, Yasuhiro Ohashi, Takao Ueno, Shojiro Motoyui and Kiosuke Murakawa, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1128-1137.
- A Generic Inflatable Structure for a Lunar/Martian Base, Willy Z. Sadeh and Marvin E. Criswell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1146-1156.
- Goals and Requirements for Scientific Lunar Rovers, Charles Meyer, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p166-174.
- Gravitational Wave Astronomy and the Lunar Ligo Concept, Norman LaFave and Thomas L. Wilson, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1442-1451.
- 14-31. Habitat Configuration Evaluation Criteria for Moon/Mars, Kriss J. Kennedy, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p979-987.
- Helium-3 on the Moon: Model Assumptions and Abundances, Lawrence A. Taylor, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed.
- and Stanley Lokaj, ed., 1994), p678-686.

 In-situ Extraction of Lunar Soil Volatiles, Layton J. Wittenberg, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p687-696.
- Intelligent Excavator Control for a Lunar Mining System, Paul J. A. Lever, Fei-Yue Wang and Deqian Chen, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p97-105.
- An Intelligent Robotic Vehicle for Lunar/Martian Applications, Fei-Yue Wang, Michael Marefat, Paul J. A. Lever and Larry Schooley, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p193-201.
- JSC-1: A New Lunar Soil Simulant, David S. McKay, James L. Carter, Walter W. Boles, Carlton C. Allen and Judith H. Allton, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p857–866.

Kinetic Interpretations of First Reactivity Experiments on Lunar Basalt Samples, M. A. Gibson, C. W. Knudsen, D. J. Brueneman and H. Kanamori, (Engineering, Con-struction, and Operations in Space IV. Rodney G. Gal-loway, ed. and Stanley Lokaj, ed., 1994), p1167-1177. The Levitation of Lunar Dust Via Electrostatic Forces, S.

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Doe, J. O. Burns, D. Pettit, J. Blacic and P. W. Keaton, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p907-915

Living in Space, Michael Wifall, (Engineering, Construc-tion, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p842-845.

Logistics Carriers for the First Lunar Outpost, Thomas M. Polette, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1046-1058.

Lunar Base Aspects for Biotechnology Industry, Judith Lunar Base Aspects for Biotechnology nutustry, Judin Fielder and Nickolaus Leggett, (Engineering, Construc-tion, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1230-1236. Lunar Base Construction Using the Reinforce Earth Meth-od with Geotextile, Mikiya Okumura, Yasuhiro Ohashi,

Takao Ueno, Shojiro Motoyui and Kiosuke Murakawa, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1106-1115.

Lunar ISRU: An Evolutionary Approach, John L. Paterson, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1077-1085.

Lunar Mining, Carrie Barkhurst, (Engineering, Construc-tion, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p811-814.

Lunar Oxygen Production - A Maturing Technology, Carlton C. Allen, Gary G. Bond and David S. McKay, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1157-1166.

Lunar Oxygen Production in a Hydrogen "Cold" Plasma, Daniel E. Bullard, Peter E. Nolan and David C. Lynch, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1188-1198.

The Lunar Ultraviolet Telescope Experiment (LUTE), John D. Hilchey and Max E. Nein, (Engineering, Construc-tion, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1431-1441.

A Membrane Structure for a Lunar Assembly Building, Mark E. Schroeder and Philip J. Richter, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p186-195.

Methodology for Comparing Lunar Settlement Designs, Keith Trivelpiece, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p969-978.

Mineral Liberation and Beneficiation of Lunar High-Ti Mare Basalt, 71055: Digital-Imaging Analyses, John G. Chambers, Lawrence A. Taylor, Allan Patchen and David S. McKay, Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p878-888.

Model Studies of Effects on Lunar Soil of Chemical Explosions, Chaun-Ping Lin, Deborah J. Goodings, Leonhard E. Bernold, Richard D. Dick and William L. Fourney,

GT Oct. 94, p1684-1703

A Near-Term, Long-Duration, Lunar Outpost Design, S. Sture, S. D. Jolly and J. Happel, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p237-246.

A New Airlock Approach for Human Exploration, Stephen Capps, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p206-216.

Optical Waveguide Solar Energy System for Lunar Material Processing, Takashi Nakamura, Constance L. Senior, James M. Shoji and Robert D. Waldron, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1266Oxygen from Lunar Soil via Fluorination, Wolfgang Seboldt, Stephan Lingner, Stephan Hoernes and Wolfgang Grimmeisen, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1210-1219.

Oxygen Generation from Synthetic Moon Soil Using a Plasma Reactor, P. R. Taylor, S. A. Pirzada, K. A. Prisbrey, H. Gold and R. E. Hicks, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1178-1187.

Pneumatic Conveying of Materials at Partial Gravity, Thomas A. Sullivan, Elissa Koenig, Christian W. Knud-sen and Michael A. Gibson, AS Apr. 94, p199-208.

A Practical Application of Concession Schemes to Space Energy Projects, Michel Lyonnet du Moutier, (Engineering, Construction, and Operations in Space IV, Rodney Galloway, ed. and Stanley Lokaj, ed., 1994), p658-

Processing of Lunar Materials, W. Howard Poisl and B. D. Fabes, AS July 94, p263-275.

Production of Lunar Concrete Using Molten Sulfur, Husam A. Omar and Mohsen Issa, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p952-959.

Recent Developments in the Robotic All Terrain Lunar Exploration Rover (RATLER) Program, P. R. Klarer, (Ro-botics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p202-209.

Recycled Engineering Applied to the First Lunar Outpost, Todd C. Parfet and Belinda S. Deeds, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p988-997.

Reduction, Reuse, and Recycling on a Future Lunar Base, Sarah Soliz, Laura Symonds and Christine Willan, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p804-810.

Reliability of Structures for the Moon, Haym Benaroya, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p166-175.

A Remote Sensing Evaluation of Lunar Pyroclastic Deposits, B. Ray Hawke and Cassandra R. Coombs, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1008-1019.

Remote Sensing of Astrofuel™, K. R. Harris, H. Y. Khater and G. L. Kulcinski, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p648-657.

Reservoir Estimates for the Sulpicius Gallus Region, Bonnie Cooper, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p889-896.

Roles of the Lunar-Solar Power System In Development of the Resources of Greater Earth for Mankind, David R. Criswell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p638-647.

Science Operations and Engineering Impacts to Lunar Outpost Design, John E. Gruener and David S. McKay, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p998-1007.

A Simple Method of Producing Lunar Soil Simulants for Engineering Studies, Koon Meng Chua, Scott Pringle and Stewart W. Johnson, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p867-877.

Sintering Bricks on the Moon, Carlton C. Allen, John C. Graf and David S. McKay, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1220-1229.

A Space Station Simulation: EXEMSI '92 A Study on Confinement and Isolation of a Mixed Crew of Four during 60 Days, J. Collet, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p494-503.

- A Space Suit for Productive and Safe Extravehicular Activity (EVA), Brand Norman Griffin, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1372-1381.
- A Stewart Platform Lunar Rover, Roger Bostelman, James Albus, Karl Murphy, Tsung-Ming Tsai and Ed Amatucci, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p175-183.
- Surface Payload Unloading and Deployment Options for a Lunar Return Mission, John Connolly and Larry Toups, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1059-1069.
- Terrestrial Analogs: Implications for Lunar Lava Tubes, Cassandra R. Combs and B. Ray Hawke, (Engineering, Construction, and Operations in Space IV, Rothey G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1138-1145.
- Transferring Construction Technology to the Moon and Back, John F. Connolly and Debra D. Shoots, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1086-1096.
- Transport Infrastructure Choices for Industrial Cis-lunar Traffic, John Sved, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p587-596.
- Branis Josai, J. J. Advanced Technology Telescope for Space Applications, P. C. Chen, R. J. Oliversen, H. Hojaji, W. K. Chu and T. L. Wilson, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1422-1430.
- Very Low Frequency Radio Astronomy from Lunar Orbit, Nebojsa Duric and Jack O. Burns, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1382-1389.

Moorin

World's Largest Floating Casino is Firmly Secured, CE Oct. 94, p19-20.

Morphology

- Calibration of Movable Bed Model for Armant Area, F. S. El-Gamal and A. F. Ahmed, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p119-128.
- The Continental Shelf: A Source for Naturally-Delivered Beach Sand, Robert H. Osborne, Kelly A. Ahlschwede, Sean D. Broadhead, Kyung Cho, Joshua R. Feffer, Arthur C. Lee, Jinyou Liu, Craig Magnusen, Janette M. Murrillo de Nava, Rory A. Robinson, Chia-Chen Yeh and Yi Lu, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p335-349.
- Experimental Field Investigations of Small Delta Formation, Maria Mikhailova, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p175-188.
- Field Studies of Variability of Underwater Coastal Relief and Bed Sediment Composition During Storm, Ruben D. Kos'yan and Nicolay V. Pykhov, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p89-102.
- Microstructure, Image Analysis, and Fly Ash in Hardened Cement Paste, Sidney Diamond, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p337.
- Morphology of Reciprocal Frame Three-Dimensional Grillage Structures, John C. Chilton, Ban Seng Choo and Jia Yu, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1065-1074.
- The Nature of Structural Morphology and Some Interdisciplinary Examples, Ture Wester, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1000-1009.
- Practical Importance of Structural Features of Clinker Phases, A. I. Boikova, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p616-617.

- A Quasicrystal for Denmark's Coast, Tony Robbin, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1045-1052.
- The Response of a Barred Coast to a Sequence of Storms, Felix C. J. Wolf, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p44-58.
- Sediment Transport by Wind Waves, Long Waves and Mean Currents: An Experiment on Nearshore Morphodynamics, Lake Huron, Canada, Troels Aagaard and Brian Greenwood, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), pl4-28.
- Selection of Gravel-Transport Formula for Stream Modeling, Howard H. Chang, HY May 94, p646-651.
- Tensegrity Structures: Filling the Gap Between Art and Science, Michele Melaragno, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), pl 1024-1035.
- Three-Dimensional Behaviour of a Multiple Bar System, Kathelijne M. Wijnberg and Felix C. J. Wolf. (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p59-73.

Mortars

- Compressive Strength of Masonry Prisms, Magdi A. Khalifa and Ahmed E. Magzoub, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1100-1105.
- Effect of Fly Ash and Silica Fume on Alkali Silica Reactions, Mette Geiker and Niels Thaulow, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p123-136.
- Empirical Mohr-Coulomb Failure Criterion for Concrete Block-Mortar Joints, M. Ayubur Rahman and Subhash C. Anand, ST Aug. 94, p2408-2422.
- Estimation of the Thickness of Transition Zone in Concrete and Characteristics of Transition Zone in High-Strength Concrete, Hiroshi Uchikawa, Shunsuke Hanehara and Daisuke Sawaki, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p616.
- Load Carrying Capacity of SPC Composite Column, Toshiyuki Tanaka, Kazuo Inoue and Cheol-hwan Kim, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p827-832.
- Microstructural Development in High-Volume Fly-Ash Cement System, Aimin Xu and Shondeep L. Sarkar, MT Feb. 94, p117-136.
- Raw Water Cement-Mortar Lined Pipeline Corrosion A Case Study, Charles F. Anderson, Jr., (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p372-386.
- Uniform Lateral Load Capacity of Infilled Frames, Roger D. Flanagan and Richard M. Bennett, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p785-790.
- Void Mortar Joints: Bane of Brick Masonry, Clayford T. Grimm, CO Mar. 94, p152-161.

Motion

- Reflectometry, Charles H. Dowding and Fei-Chiu Huang, GT Aug. 94, p1413-1427.
- Hydraulic Conditions Required to Move Unanchored Residue Materials, J. E. Gilley, E. R. Kottwitz and G. A. Wieman, IR May/June 94, p591-606.
- Inertially Favorable Trajectories for Robot Motion in Space, Lyman J. Petrosky and Irving J. Oppenheim, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p.220-228.
- Passive Earth Pressures with Various Wall Movements, Yung-Show Fang, Tsang-Jiang Chen and Bin-Ferng Wu, GT Aug. 94, p1307-1323.
- Planning Intricate Robot Motions to Remove Natural Materials, Sudheer M. Apte and Irving J. Oppenheim, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p106-114.

Real-time Motion Vision for Robot Control in Unstruc-tured Environments, John Woodfill, Ramin Zabih and Oussama Khatib, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p10-18.

Semiactive Motion Control Using Variable Stiffness, David C. Nemin, Yingjie Lin and Roberto A. Osegueda, ST

Apr. 94, p1291-1306.

Specifying and Attaining Acceptable Marina Tranquility, Jack C. Cox, (Marinas, Parks and Recreation Develop-ments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p470-479.

Strong-Motion Data Processing, A. Gerald Brady and April M. Converse, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1600-1605.

Vibration of Suspension Bridges Under Vehicular Move-ment, P. K. Chatterjee, T. K. Datta and C. S. Surana, ST Mar. 94, p681-703.

Difficulties with Implementation of Goal Setting for Construction, Ahmad Hadavi and Raymond J. Krizek, ME Sept./Oct. 94, p48-54.

Managing Performance of Engineers, Tom D. McFarland, ME Sept./Oct. 94, p28-33.

Proactive Career Management, Glenn E. Schirmer, ME

Jan./Feb. 94, p33-36. Teaching Engineering to Increase Motivation, N. C. Mick-leborough and D. G. Wareham, El Jan. 94, p29-35.

Mountain streams

Mountain stream, An Alternative Equation for the Mean Velocity in Gravel-Bed Rivers and Mountain Torrents, Dieter Rickenmann, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p672-676.

Analysis of blocking phenomena in bifurcated channels found in mountainous rivers, Kazuyoshi Hasegawa and Toshinao Mizugaki, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p829-833.

Analysis of Levee Design in a Mountain River Using Two-Dimensional Flow Modeling, Diane M. L. Mas, Andrew J. Miller, James A. Smith and Wei-hao Chung, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p757-761.

Analysis of the Causes and Triggering Events of Disastrous Torrent Flood, Milivoje Brajković and Zoran Gavrilović, (Hydraulic Engineering '99, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p640-644.

Analysis of the Torrent Lava Flow Movement and Its Computations - One Example Applied Investigation of Disastrous Torrent Flood, Zoran Gavrilović, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p650-651.

At-A-Site Mountain River Flow Resistance Variation, James C. Bathurst, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

p682-686

Bed Load Prediction in Steep Mountain Rivers, Tamotsu Takahashi and Toyoaki Sawada, (Hydraulic Engineering 94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p810-814.

Boundary Conditions and Flow Patterns in a Mountain River, Andrew J. Miller, Diane M. L. Mas, James A. Smith and Wei-Hao Chung, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p762-766.

Chezy Formula Versus Theory and Common Sense, Witold Gustaw Strupczewski, (Hydraulic Engineering George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p662-666.

Critical and Supercritical Flows in two Unstable, Mountain Rivers, Toutle River System, Washington, Andrew Simon and J. H. Hardison, III, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p741-745.

Energy Losses in Steep Tributary Streams at Flows Near The Threshold of Bedload Entrainment, Matthew D. O'Connor, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p778-

Erosion and Deposition by Debris Flows in Mountainous Channels on North Fork Mountain, Eastern West Virginia, Daniel A. Cenderelli and J. Steven Kite, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p772-776.

Flow patterns in a mountain stream, Lisa C. Hubbard and Colin R. Thorne, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994).

p737-741

Flow-Bed Interaction and Energy Loss in Torrents, Luis Ayala and Alejandro López, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p687-691.

Fluvial Hydraulics of Streams and Mountain Rivers with Mobile Bed, Wojciech Bartnik and Alicja Michalik, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p767-771.

A General Theory of Channel Adjustment in High Gradient Streams, Gordon E. Grant, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p817-818.

Hydraulics and Sediment Transport Processes in a Pool-Riffle Rocky Mountain Stream, Douglas M. Thompson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p849.

A Mechanism of Pool Formation and Maintenance in For-

set Streams, Richard D. Smith and Robert L. Beschta, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p824-828.

Monitoring and Modeling the Transport of Coarse Single Particles in Mountain Rivers, Peter Ergenzinger and Carmen de Jong. (Hydraulic Engineering '94, George V.

Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p634. Monitoring Gravel Movement Using Radio Transmitters, Edward F. Chacho, Jr., William W. Emmett and Robert L. Burrows, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p785-

A new approach for the estimation of extreme roughness in A new approach for the estimation of extreme rouginiess in torrents by Hydraulic and Photogrammetry, Hanspeter Hodel, Thomas P. Kersten and Isidor Storchenegger, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed. 1994), p697-701.

A New Formula for Mean Velocity in Torrents, Hanspeter (Hydraulic Engineering '94, George V. Hydraulic Engineering '95).

Hodel and Isidor Storchenegger, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer,

ed., 1994), p667-671. On Habitat Simulation in Mountain Rivers, Robert T. Milhous, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p850-

Palaeohydraulic reconstruction of floods in upland UK bedrock streams: progress, problems and prospects, Paul
A. Carling, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p860-

Particle Dynamics and Bed Level Adjustments in a Mountain Stream, Paul A. Carling, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p839-843.

Roughness Coefficient in Mountain Rivers, Alfonso Ugarte and Manuel Madrid, (Hydraulic Engineering George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p652-656.

Size Characteristics of Debris Flow Deposition, Huilin Zhao and Yingyan Chen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p777.

Steep Constructed Stream Channels and Chutes, Kenneth R. Wright, F. Robert McGregor and Gardy, Kellieut draulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p657-661.

Step-Pool Streams: An Adjustment to Maximum Flow Resistance, Athol D. Abrahams, Gang Li and Joseph F. Al-kinson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p815-816.

Study of Friction Factors in the Upper Reaches of the Rio Grande, Cassie C. Klumpp and Drew C. Baird, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p702-706.

A Study on Mathematical Model for Sediment Yield in Mountain Regions with Large Hillside Slopes, Duo Fang and Guoliang Yu, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p752-756.

Thresholds for Gravel and Cobble Motion, Katherine J. Chase, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p790-794

Turbulent Velocities in a Mountain River, Graeme M. Smart, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p844-848.

Mountains

Evaluating Flow Resistance Using Height of Roughness Protrusions, Ivana Marešová, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p712-716.

Flood Propagation on Mobile Beds under Mountainous Flow Conditions, C. Beffa and R. Faeh, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p327-341.

A Nested-Model Approach to Investigate Climate Change, Lauren E. Hay and George H. Leavesley, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p477-480.

Movable bed models

Calibration of Movable Bed Model for Armant Area, F. S. El-Gamal and A. F. Ahmed, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p119-128.

A comparison between computed and measured bed evolution in a river bend, L. Montefusco and A. Valiani, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p357-369.

Flood Propagation on Mobile Beds under Mountainous Flow Conditions, C. Beffa and R. Faet, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p327-341.

Modeling Bottom Friction in Wind-Wave Models, Hendrik L. Tolman, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p769-783.

Mud

Banks, Glynn E. Michael P. Alexander and Allen Teeter,
(Dredging '94, E. Clark McNair, Jr., ed., 1994), p304-313.
Case Study of Debris Flow, Robert W. Day, CF Aug. 94,

p192-200.

Construction of Intertidal Mudflats as a Beneficial Use of Dredged Material, G. L. Ray, D. G. Clarke, T. P. Wilber and T. J. Fredette, (*Dredging '94*, E. Clark McNair, Jr.,

ed., 1994), p946-955.
The December 1992 Storm at the New York Mud Dump Site, Scott McDowell, Brian May and Douglas Pabst, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p786-

Development of a Technique to Acoustically Detect and Study Fluid Mud and its use in Dredging Management, Shawn Hanrahan and Anthony DePasquale, (*Dredging* '94, E. Clark McNair, Jr., ed., 1994), p440-448.

The Dioxin Capping Project at the NY Mud Dump Site, Scott McDowell, Brian May and Douglas Pabst, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1270-1277.

Dredged Material Dispersion from the Vicinity of a Pipeline Discharge, Tylers Beach, Virginia, Allen Teeter, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p918-927.

Numerical Modeling of Fluid Mud Transport in Estuaries, Yan Yan and Earl J. Hayter, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1070-1074.

Research on the Consolidation of Mud, Erik Toorman and Marc Sas, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p430-439.

Wave Interaction with Fluid Mud in Rectangular Trench, Francis C. K. Ting, WW Mar./Apr. 94, p154-178. "So You Want to Remediate Contaminated Mud! These are Your Five Choices.", Louis J. Thibodeaux, Danny D. Reible and Kaliiat T. Valsaraj, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p588-595.

Multi-port diffuser

Innovative Design of a Multiport Diffuser, Mindy L. Roberts and Bernadette H. Kolb, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p56-65.

Multimodal information systems

Applying Multimedia Technology to Project Control, L. Y. Liu, A. L. Stumpf and S. S. Kim, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p608-613.

Multimedia Technologies for Civil and Construction Engineering Professional Practice, Jorge A. Vanegas and Gary Smith, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p592-599.

Multiple objective analysis

Analysis and Evaluation of Alternative Technologies, Simaan M. AbouRizk, Srinivasa R. Mandalapu and Miroslaw Skibniewski, ME May/June 94, p65-71.

Balancing Environmental Issues when Developing the Marina Project Scope, Jon Guerry Taylor, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p69-76.

Freshwater-Inflow Need of Estuary Computed by Texas Estuarine MP Model, Junji Matsumoto, Gary Powell and David Brock, WR Sept./Oct. 94, p693-714.

Goal Programming Models for Determining Freshwater Inflows to Estuaries, Ning Mao and Larry W. Mays, WR May/June 94, p316-329.

Interactive Design of Service Routes, Jin-Yuan Wang and Jeff R. Wright, TE Nov./Dec. 94, p897-913.

Multi-Attribute Rehabilitation of Storm or Combined Sewer Systems, Santiago M. Reyna, Jacques W. Delleur and Jorge A. Vanegas, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p.55-72.

Optimal Capacity-Expansion Planning in Multiaquifer Systems, Hakan Başağaoğlu and Hasan Yazıcıgil, WR Nov./Dec. 94, p836-856.

Optimal Land Allocation for Solid- and Hazardous-Waste Landfill Siting, S. Diane Minor and Timothy L. Jacobs, EE Sept./Oct. 94, p1095-1108.

Simultaneous Routing and Siting for Hazardous-Waste Operations, Timothy L. Jacobs and John M. Warmerdam, UP Sept. 94, p115-131.

Multiple purpose projects

Dual Purpose Pipeline in the 1900s Environment, Randall C. Hill and Javier Saunders, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p119-128.

Menomonee Valley Greenway Feasibility Study, Therese Gripentrog, Wink Hastings and Eduard J. Freer, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p1-6.

Multiple purpose structures

Pregame Show, Paul Tarricone, CE Aug. 94, p34-37.

Multiple regression models

Punching Shear of Reinforced Concrete Shell Structures, Gajanan M. Sabnis and Amjad A. Shadid, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p907-916.

Multiple regressions

Assessing Nassau County's Water Conservation Program, Mark Maimone and Michael Labiak, WR Jan./Feb. 94, p90-100.

Discharge Coefficient of Rectangular Side Weirs, R. Singh, D. Manivannan and T. Satyanarayana, IR July/Aug. 94, p814-819. Multiple use

Certification of a Spent Fuel Cask for Storage and Transportation, Meg Lusardi, Robert M. Bernero and Charles H. Haughney, (High Level Radioactive Waste Manage-ment, High Level Radioactive Waste Program Committee, 1994), p1168-1173.

Concept for a Mixed Use Recreational Harbor on Lake Superior, Kenneth M. Cobb and Dorian Grilley, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p104-113.

Confirmation of MRS/MPC Transfer Facility Sizing Using Simulation Modeling, E. Scott Houston and Jennifer D. Hadley, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1387-1392.

Fisharina Policies in Japan, Noboru Oshima, Sanji Kida, Motobumi Manabe and Nobuo Mikami, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p201-210.

Integrated Planning for International River Basin, Alvin S. Goodman, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p130-

- Multi-Purpose Canister At-Reactor and Monitored Retrieval Storage, Tonya H. Sawyer and Robert G. Eble, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1380-1386.
- Multi-purpose Canister Conceptual Design Approach, Nick L. Seagle, Giles G. Childress, III, James R. Thornton, David N. Summers and Alan H. Wells, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1143-1151.
- Multi-Purpose Canister Criticality Control Design Fea-tures, James R. Thornton, Kelvin J. Montague, Alan H. Wells and Daniel A. Thomas, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p823-830.

Multiple Use Pier Facilities in Parks, Jim Posda and Jon Guerry Taylor, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed.,

1994), p414-423.

Role of the Dual Purpose (Storage and Transport) Metal Cask In the Spanish Strategy for Temporary Storage of Spent Fuel, José Gago and José M. Grávalos, (High Level Radioactive Waste Management, High Level Ra-dioactive Waste Program Committee, 1994), p1174-

Stakeholder Involvement in the Evaluation of a Multipurpose Canister System, Susan Smith, Pete Bolton and Tim Dantoin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p314-1-314-6.

The Waterfront Development Process, Jeffrey A. Bartoszek and Ronald E. Schults, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p93-103.

Multistory buildings

Alternative Decisions for Space-Based Scheduling in Multi-Story Projects, Walid Y. Thabet and Yvan J. Beliveau, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1164-1171.

Concrete Buildings in Regions of High Seismicity, S. K. Ghosh, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p31-36.

HVLS: Horizontal and Vertical Logic Scheduling for Multistory Projects, Walid Y. Thabet and Yvan J. Beliveau, CO Dec. 94, p875-892.

Malaysia's Twins: High-Rise, High Strength, Rita Robison, CE July 94, p63-65.

Modeling Work Space to Schedule Repetitive Floors in Multistory Buildings, Walid Y. Thabet and Yvan J. Beliveau, CO Mar. 94, p96-116.

Overview of Hurricane Andrew in South Florida, Ronald A. Cook, (Hurricanes of 1992: Lessons Learned and Imolications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p70-83.

Representation of Vertical Constraints Knowledge for Scheduling Multi-Story Projects, Walid Y. Thabet and Yvan Beliveau, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p349-355.

Seismic Response of Full-Scale Five-Story Reinforced-Masonry Building, F. Seible, M. J. N. Priestley, G. R. Kingsley and A. G. Kürkchübasche, ST Mar. 94, p925-

370. A Simplified Method of Multistory-frame Analysis Including the P-Δ Effect, Hani Melhem and Khalid Niazi, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1302-1309.

Simulated Seismic-Load Tests on Full-Scale Five-Story Masonry Building, F. Seible, G. A. Hegemier, A. Igarashi and G. R. Kingsley, ST Mar. 94, p903-924.

Wind Action on Highrise Structures: Codes - Wind Tunnel - Reality, Nicholas Isyumov, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p430-445.

Municipal engineering
Cooperative Ground-Water Resources Management: Local
Perspective, Amleto A. Pucci, Jr., WR Nov/Dec. 94, p984-991.

Municipal government

Development of an Intergovernmental Agreement For a Major Multi-Party Recharge Project in Central Arizona, Richard S. Siegel, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p533-536.

Grazing for Funding: Agency Hydrodiplomacy, C. M. Rogers and J. E. Robinson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and

Harry N. Tuvel, ed., 1994), p561-564.

Municipal wastes

Clearing the Air About Sludge Incinerator Emissions, Phil-lip M. Martin, Eugene W. Waltz and Richard D. Kuchenrither, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p122-128.

Comprehensive Fate Model for Metals in Municipal Wastewater Treatment, Wayne J. Parker, Hugh D. Monteith, John P. Bell, Henryk Melcer and P. Mac Berthouex, EE Sept./Oct. 94, p1266-1283.

Design Optimization of Coventry Municipal Solid Waste Incinerator, V. Nasserzadeh, J. Swithenbank, C. Schofield, D. W. Scott, A. Loader and A. Leonard, EE Nov./Dec. 94, p1615-1629.

Grey Dynamic Programming for Waste-Management Plan-ning under Uncertainty, Guo H. Huang, Brian W. Baetz and Gilles G. Patry, UP Sept. 94, p132-156.

Household Hazardous Wastes-Discard Patterns and Management Options, Chris Zeiss, UP June 94, p87-103.

Modeling Settlements of an Existing Municipal Solid Waste Landfill Sideslope Using an Earthen Surcharge Pile, William L. Deutsch, Jr., Owen R. Esterly and John Vitale, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1135-1148.

Nitrification in Single-Stage Trickling Filters, Rao Y. Surampalli, O. Karl Scheible and Shankha K. Banerji, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p694-

Sewers and Computers, Rodolfo B. Fernandez and Brian W. Daniels, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p836-842.

Thermoplastic Stabilization of MSW Combustor Ash, Vincent T. Breslin and Shawn E. Tisdell, EE Jan./Feb. 94, p154-168.

Municipal water

Adaptive Forecasting of Hourly Municipal Water Con-sumption, Chatree Homwongs, Tep Sastri and Joseph W. Foster, III, WR Nov./Dec. 94, p888-905.

Control of Microbial Water Quality in the Little Rock, Arkansas Distribution System, Bruno Kirsch, Jr., Craig Noble, Christopher H. Yu, Blaise J. Brazos and John T. O'Connor, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p58-65.

The Cost of Water Reuse is a Benefit to All, Richard W. Harris and Jacqueline A. Millet, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p706-709.

The Everett, Washington, Water Supply IRP, Dan Mathias, Lloyd Skinner and Lisa Tobin, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed.

and Harry N. Tuvel, ed., 1994), p404-407.

Groundwater Management and Systems Operations Optimization Utilizing Supply, Well Reliability, and Demand Distribution as Decision-Making Criteria, Kathlie Suyn Jeng and Jerry Rogers, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p77-80.

Lesson Learned form Implementing M&I Optimal Water Delivery, Otto J. Helweg and Lindell E. Ormsbee, (Water Policy and Management: Solving the Problems. Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

p730-733

Modeling Municipal Water Demands for a Pump Station Area, Bindu Reddy, Jerry Rogers, Theodore Cleveland, Lu-Chia Chuang and Kathlie Sheu, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p65-68.
Performance of Integrated Municipal Water System During

Drought, Radwan A. Al-Mubarak Al-Weshah and Doug-las T. Shaw, WR July/Aug. 94, p531-545. Potable Water Reclamation—A Practical Option to Tradi-tional Sources, Gary Bostrom, Peter D. Binney and Glenn Hamilton, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p702-705.

Wastewater Reclamation at Davenport, Washington, Douglas L. Smith, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuv-

el, ed., 1994), p834-837.

Lateral and Withdrawal Strength of Nail Connections for Lateral and Windrawai ouengin of main Connections for Manufactured Housing, Steve G. Winistorfer and Law-rence A. Soltis, ST Dec. 94, p3577-3594. Proposed Test Method for Determining Bending Yield

Proposed Test Niethod for Determining bending Tield Moment of Nails, John H. Showalter, Jr. and David G. Pollock, Jr., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p918-922. Uplift Resistance of Plywood and OSB Roof Sheathing, S.

D. Shiff, D. P. Mizzell and M. D. Zaitz, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1054-1059.

Validation of the European Yield Model for Nailed Connections, Steve G. Winistorfer, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p923-928.

NASA

NASA's Mission to Planet Earth: Will Civil Engineering Reap Benefits? John H. McElroy, El Oct. 94, p401-404.

National Oceanic and Atmospheric Administration

NDBC Wave Data—Current and Planned, K. E. Steele and Theodore Mettlach, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p198-207.

National Weather Service

NDBC Wave Data—Current and Planned, K. E. Steele and Theodore Mettlach, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p198-207.

Native Americans

Summer Engineering Outreach Program for Native Ameri-cans, Omnia El-Hakim, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p868-872.

Natural frequency Analysis of Free Vibrations of Tall Buildings, Qiusheng Li, Hong Cao and Guiqing Li, EM Sept. 94, p1861-1876.

Effect of Initial Curvature on Natural Frequency of Thin Plate on Hinge Supports, Qiulin Yu, Naser Mostaghel and Kuan-Chen Fu, EM Apr. 94, p796-813.

Free Vibrations of Laminated Anisotropic Cylindrical Shells, P. R. Heyliger and A. Jilani, EM May 93, p1062-1077.

Lateral Stiffness of Frames and Effective Length of Framed Columns, Ruhi Aydın and Hasan Gönen, ST May 94, p1455-1470.

iatural gas

Breakout Session 6C: Alternative Fuels, Ovi Colavincenzo, Gerald Esper and Peter Hagerty, (Transportation Plan-ning and Air Quality II, Thomas F. Wholly, ed., 1994), p164-166.

DOD Energizes Fuel-Cell Development, CE Oct. 94, p17-

Doubling A Pipeline, Gary Walker and John Myrick, CE Jan. 94, p50-53.

The Impact of the Doe Decision Making Process at the Waste Isolation Pilot Plant with Respect to Petroleum Reserves, Matthew Silva, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1753-1761.

Oil and Gas Exploration Near Yucca Mountain, Southern Nevada, John A. Grow, Charles E. Barker and Anita G. Harris, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p1298-1315.

Private Cogeneration Plant Flies at JFK Airport, CE Sept. 94, p22.

Natural resources

Horticultural, Botanical & Environmental Resources, Diane S. Lindsley, (), p534-535.

Is There Engineer Liability Under Superfund?, CE Mar. 94, p38.

Navier's equation

Braced Double Skinned Structure in Lunar Application, Hamid R. Adib-Jahromi, Ramesh B. Malla and Michael A. Accorsi, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p47-56.

Application of the FESWMS-2DH Software to Solve the Navigation Problem at EL-Menya Bridge in Egypt, Khaled Kheireldin, Ahmed Fahmey and Mohamed Gasser, (Computing in Civil Engineering, Khalil ser, (Computing in Civil Er Khozeimeh, ed., 1994), p1244-1250.

Autonomous Navigation for Structured Exterior Environ-ments, J. Bryan Pletta, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed.,

1994), p79-87.

Calibration of Movable Bed Model for Armant Area, F. S. El-Gamal and A. F. Ahmed, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p119-128.

Chicago River Navigation Study, Michael A. Kraman, Nicholas Pansic and Vedat Demirel, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p321-332.

Design and Execution of Hydrodynamic Field Data Collection using Acoustic Doppler Current Profiling Equipment, Timothy L. Fagerburg and Thad C. Pratt, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p530-538.

Development of Missouri River Navigation Analysis, David Gjesdahl and Arthur Hawnn, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p686-689.

Dioxin Contamination in Sediments of the Port of New York and New Jersey: The Search for Criteria, John F. Tavolaro and Joseph Olha, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p150-159.

Dredging Desk Reference: Accomplishments and Future Developments, Thomas M. Verna and Lyle J. Ma-ciejewski, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p170-179.

Effects of Commercial Vessel Passage in Narrow Channels With and Without Ice Cover, John G. Lyon, Donald C. Williams and Kevin G. Flannigan, CR June 94, p47-64.

Factors Affecting Degradation of Clay Masses, Paul A. Gilbert, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p449-457.

Formulation of the Interagency Coordination Team for the Houston-Galveston Navigation Channels, Texas Project, Dalton H. Krueger, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p378-383.

Management of Sediments on the Red River Waterway Project, Phil G. Combs, C. Fred Pinkard, Jr., William H. Espey, Jr. and Ben Littlepage, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1125-1130.

Methods to Mitigate Thermally Induced Distortion, Fred M. Cutting, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p514-523.

Missouri River Economic Impacts Model, Charles Hiller-son and Ronald Roberts, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and

Harry N. Tuvel, ed., 1994), p637-640. Navigation Channel Design Using Real-Time Marine Simulator, Dennis W. Webb, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1081-1090.

The Navigation Data Center and Its Role in Dredging Management, Virginia R. Pankow, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p490-498.

Navigation of an Autonomous Robot Vehicle, Arturo L.

Rankin, David G. Armstrong, II and Carl D. Crane, III, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p44-51.

Navigation of Autonomous Mobile Robots, Georges Blaha and Stephen R. Gerig, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed.,

1994), p70-78.

Onboard Image Processing With Transputers, András Balázs, József Biró and Sándor Szalai, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1323-

Shoals System Capabilities for Hydrographic Surveying, J. L. Irish, W. J. Lillycrop, L. E. Parson and M. W. Brooks, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p314-

321

Statewide Consumptive Use Estimates, T. Teegarden, L. Pochop, G. Kerr and R. Delaney, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p485-488.

ed. and Harry N. Tuvet, ed., 1994), p485-488.

A Surface Exploration Vehicle Testbed for Real-Time Control Exerimentation, Songjae Lee, R. Michael Brown, Ta-Yu Yuan, Chih-Kang Chao, Dhaval Patel, Gordon K. Lee and Robert B. Kelley, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1333-1344

Temporal and Spatial Variations of Suspended Sediment Concentration during Navigation Traffic in a Natural River, Renjie Xia, Ta Wei Soong and Nani G. Bhowmik, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1131-1135.

Thermo-Hydrodynamic Modelling of the Chicago Sanitary and Ship Canal, Ejaz Mohammad and Forrest M. Holly, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1306-1310.

Verification of Lake Superior Outflow Equations, Scott J. Thieme, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p462-

Nearshore circulation

Nearshore Confined Disposal in a Tidally-Influenced Environment—Design and Operation Experience in Puget Sound, Douglas A, Hotchkiss and Charles D, Boatman, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1260-

Performance of Nearshore Berm Disposal at Port Canaveral, Florida, Kevin R. Bodge, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1182-1191.

Wind-Driven Dispersion in New Jersey Coastal Waters, A. K. M. Quamrul Ahsan, Michael S. Bruno, Lie-Yauw Oey and Richard I. Hires, HY Nov. 94, p1264-1273.

Nebraska

Nebraska Builds First Metric Bridge in U.S., NE Oct. 94,

Start-ups, CE Nov. 94, p8.

Third Party Not Liable for Negligence, CE June 94, p30.

Negligence

All-Risk Policy Offers No Protection Against Alleged Negligence, CE Oct. 94, p27.

Contractor Not Immune From Sub's Excavating, CE Apr.

Contractual Relationship Not a Necessity for Lawsuit, CE

Jan. 94, p27.

Court Clarifies Subcontractor Indemnity, CE May 94, p30. Defining Third-Party Liability, CE Jan. 94, p36.

Subcontractor's Indemnity is Limited, CE July 94, p24.

Negotiations

Dispute Avoidance and Resolution for Consulting Engineers, Richard K. Allen, 1993, 0-87262-903-1, 85pp.

Five Steps to Resolving Construction Disputes-Without Litigation, Richard H. Steen, ME July/Aug. 94, p19-23.

The ICR; \$130 Million of Water Quality Monitoring, Albert Ilges and Fredrick W. Pontius, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p788-791.

More Than an Underground Success, James Denning, CE

Dec. 93, p42-45.

Secretary of Energy Review of the Civilian Radioactive Waste Management Program, Christopher A. Kouts, Allen B. Benson and Patricia Van Nelson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p9-12.

Technical Understanding in Successful Environmental Negotiations, Nina Burkardt, Berton L. Lamb and Terry J. Waddle, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p694-697.

Vietnam: Taming the Tiger, Irwin Jay Robinson, WP Spring 94, p6-8.

Model to Estimate Highway Earthwork Cost in Nepal, Naresh Sthapit and Hiroshi Mori, TE May/June 94,

Integrated Environmental Monitoring Dredging Projects in the Netherlands, Thomas Arts and Andre Kok, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1370-1379.

Measurement, Harmen C. Botma and John B. Leenhouts, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p708-

Time-related Deflections of Cantilever Bridges, Cornelis van der Veen, Marcel van Vliet and Ane de Boer, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p922-929.

Elasto - Plastic Analysis of Cable Net Structures, J. L. Meek, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p781-790.

Network analysis

Hydraulic Analysis of the Water Distribution System, Vail Valley Consolidated Water District, Vail, Colorado, Mark Rosser and Kevin W. McBrien, (*Hydraulics of Pipelines*, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p452-472.

Predicting Pipe Failure Effects in Water Distribution Networks, P. W. Jowitt and Chengchao Xu, WR Jan./Feb. 93, p18-31.

Network design

Design of Branched-Water-Supply Network on Uneven Terrain, Brian Young, EE July/Aug. 94, p974-980.

Mulitvariate Geostatistical Design of Ground-Water Monitoring Networks, Fethi Ben-Jemaa, Miguel A. Mariño and Hugo A. Loaiciga, WR July/Aug. 94, p505-522.

Networks

Alternative Designs for a Water Resources Planning and Management Electronic Information Exchange Network, Quentin W. Martin, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p690-693. Band Width in Joint Adjustment of Geodetic Networks Having Common Points, Olcay Öztan, Yunus Kalkan, Zafer Kızılsu and Ufuk Özerman, SU Feb. 94, p3-10.

Developing a National Spatial Data Infrastructure, John McLaughlin and Sue Nichols, SU May 94, p62-76.

Global Network Optimization for Pavement Management, Kelvin C. P. Wang and John Zaniewski, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p474-482.

Implementing a National Wave Monitoring Network Some Lessons and Plans, David D. McGehee and J. Michael Hemsley, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p208-222.

A Parameter Network and Model Pyramid for Managing Technical Information Flow, Scott Sinnock and Hollister A. Hartman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p306-314.

Quality Control with Reliability for Large GPS Networks, Alfred Leick and Michael B. Emmons, SU Feb. 94,

p25-41.

Some Applications of Neural Networks in Structural Engineering, Jamshid Ghaboussi, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p25-36

Using GPS to Improve Existing Classical Network, Szu-Pyng Kao and J. S. Bethel, SU May 94, p77-91.

Value of Concurrent Engineering for A/E/C Industry, Jesus M. de la Garza, Primo Alcantara, Jr., Munish Kapoor and P. S. Ramesh, ME May/June 94, p46-55.

Neural networks

Analogy-Based Solution to Markup Estimation Problem, Tarek Hegazy and Osama Moselhi, CP Jan. 94, p72-87.

The Application of Artificial Neural Networks to Civil Engineering, Ian Flood, Nabil Kartam and Tanit Tongthong, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p668-675.

Application of Fuzzy Logic and Neural Networks to Automatically Detect Freeway Traffic Incidents, Chien-Hua Hsiao, Ching-Teng Lin and Michael Cassidy, TE Sept./ Oct. 94, p753-772.

Application of Neural Networks in Vibrational Signature Analysis, M. F. Elkordy, K. C. Chang and G. C. Lee, EM

Feb. 94, p250-265.

An Artificial Neural Network Approach to Allocating Con-struction Resources, Abdullah M. Alsugair and David Y. Chang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p950-957.

An Artificial Neural Network Approach to Pavement Maintenance Decision Support System, Abdullah M. Alsugair and Essam Sharaf, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p942-949.

Common Misconceptions about Neural Networks as Approximators, William C. Carpenter and Jean-Francois Barthelemy, CP July 94, p345-358.

Comparison of Traditional and Neural Classifiers for Pavement-Crack Detection, Mohamed S. Kaseko, Zhen-Ping Lo and Stephen G. Ritchie, TE July/Aug. 94, p552-569 omputing in Civil Engineering, 2 vols., Khal

Computing in Civil Engineering, 2 vols., Khalil Khozeimeh, ed., 1994, 0-7844-0026-1, 2275pp.
Computing Truck Attributes with Artificial Neural Networks, N. Gagarin, I. Flood and P. Albrecht, CP Apr. 94,

p179-200.

Conceptual Design Using Evolutive-Cognitive Computing Techniques, Donald E. Grierson, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2183-2190.

Damage Detection in Structures Based on Feature-Sensitive Neural Networks, Z. Peter Szewczyk and Pra-

bhat Hajela, CP Apr. 94, p163-178.

DBID: Analogy-Based DSS for Bidding in Construction, Osama Moselhi, Tarek Hegazy and Paul Fazio, CO Sept.

93, p466-479.

Estimating Clay Liner and Cover Permeability Using Computational Neural Networks, Girish Agrawal, Saroj Weeraratne and Kris Khilnani, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), pl 15-122.

Estimating Construction Productivity: Neural-Network-Based Approach, Li-Chung Chao and Miroslaw J. Skib-niewski, CP Apr. 94, p234-251.

Evaluating Concrete Mesoscale Properties Using Neural Networks, John E. Bolander, Jr., Toshihiro Ebihara and Hiroshi Hikosaka, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p475-

Genetic Algorithms and Neural Networks: Do Pluralized Techniques Hold Any Advantages for Designing Groundwater Quality Assurance Systems? J. Wayland Eheart, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p258-261.

Interpretation of Nondestructive Integrity Tests Using Artificial Neural Networks, Glenn J. Rix, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p1346-1351.

Neural Network for Gap Acceptance at Stop-Controlled In-tersections, Prahlad D. Pant and Purushothaman Balakrishnan, TE May/June 94, p432-446.

Neural Networks for River Flow Prediction, Nachimuthu Karunanithi, William J. Grenney, Darrell Whitley and Ken Bovee, CP Apr. 94, p201-220.

Neural Networks in Civil Engineering. I: Principles and Understanding, Ian Flood and Nabil Kartam, CP Apr. 94, p131-148.

Neural Networks in Civil Engineering. II: Systems and Application, Ian Flood and Nabil Kartam, CP Apr. 94, p149-162.

Neuromodex-Neural Network System for Modular Construction Decision Making, Mirza B. Murtaza and Deborah J. Fisher, CP Apr. 94, p221-233.

Planning and Implementing a Management System for Utility Cuts in City Streets, Rajagopal S. Arudi, Prahlad D. Pant, Andrew Bodocsi and Ahmet E. Aktan, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p764-771.

Predicting Changes in Construction Cost Indexes Using Neural Networks, Trefor P. Williams, CO June 94,

Refinement of Cost Estimates with Artificial Neural Nets, Irtishad U. Ahmad and Syed T. Rahman, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1373-1380.

Seismic Liquefaction Potential Assessed by Neural Networks, Anthony T. C. Goh, GT Sept. 94, p1467-1480.

Selecting Precast Concrete Building Systems, John I. Mess-ner, Victor E. Sanvido and Masaaki Ikeda, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p368-371.

Simulating Structural Analysis with Neural Network, James L. Rogers, CP Apr. 94, p252-265.

Site Characterization by Artificial Neural Networks, Donna M. Rizzo, David E. Dougherty and Theodore P. Lillys, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p250-253.

Structure Modelization Using Expert Elements 'Neural Stiffness Method', Ricardo Barrenechea, Fabián Calcagno and Guillermo Gulli, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p676-683.

Long-Term Simulation of Decreased Acid Loading on Forested Watershed, Todd H. Rees and Jerald L. Schnoor, EE Mar./Apr. 94, p291-312.

1993 Recreational Vehicle (RV) Park Census in Beatty and Pahrump, Nevada, Lloyd E. Levy and Marcia D. Housel, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p48-55.

Active Versus Passive Radon Monitoring at the Yucca Mountain Site, Michael D. Griffin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1953-1958.

Analyses of Releases Due to Drilling at the Potential Yucca Mountain Repository, R. W. Barnard, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1292-1297.

Analysis of Potential Highway Routes to Yucca Mountain, Shashi K. Sathisan, Emelinda M. Parentela and Michael S. Lee, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1278-1285.

Applications of Multi-mode Imaging to Multiple Offset VSP Data, A. H. Balch, Cemal Erdemir and Joseph P. Rousseau, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p2797-2803.

Appropriateness of One-Dimensional Calculations for Repository Analysis, Roger R. Eaton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1492-1500.

Approximating the Imbibition and Absorption Behavior of a Distribution of Matrix Blocks by an Equivalent Spherical Block, Robert W. Zimmerman and Gudmundur S. Bodvarsson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2030-2037.

An Auxiliary Ventilation Design Approach for the ESF Development at Yucca Mountain, P. Mousset-Jones and F. Calizaya, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Commit-

tee, 1994), p508-514.

A Borehole Instrumentation Program for Characterization of Unsaturated-Zone Percolation, Jack Kume and Joseph P. Rousseau, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2076-2083.

Calculation of k_{ett} For Plutonium in High-Level Waste Packages, Paige R. Zielinski and William G. Culbreth, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p679-683. Can You Top This?, CE Aug. 94, p8.

The Case for Retrievable High-Level Nuclear Waste Disposal, Eugene H. Roseboom, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1774-1781. Casino Construction All Aces in Las Vegas, CE Feb. 94,

p10.

Characterization of a Desert Soil Sequence at Yucca Mountian, NV, William R. Guertal, Alan L. Flint, Lon L. Hofmann and David B. Hudson, (High Level Radioactive Waste Management, High Level Radioactive Waste

The Waste Management, right level Radioactive Waste Program Committee, 1994b, p2755-2763.

Constraining Local 3-D Models of the Saturated-Zone, Yucca Mountain, Nevada, G. E. Barr and Sharon A. Shannon, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1814-1821.

A Critically Educated Public Explores High Level Radio-active Waste Management, Jane E. Blum, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p224-231

Development of Functional Characteristics of Vehicle Mounted Plastic Scintillation System, John G. Follette, Jeffrey J. Tappen and Christopher T. Briggs, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1964-1970.

Development of Stochastic Indicator Models of Lithology, Yucca Mountain, Nevada, Christopher A. Rautman and Thomas H. Robey, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Com-

mittee, 1994), p2510-2519.

Effect of Fractures on Repository Dryout, Roger R. Eaton,
(High Level Radioactive Waste Management, High
Level Radioactive Waste Program Committee, 1994),

p2442-2449

The Effect of Fuel Type in Unsaturated Spent Fuel Tests, P. A. Finn, M. Gong, J. K. Bates, J. W. Emery and J. C. Hoh, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1080-1087.

Electrical Properties of Topopah Spring Tuff as a Function of Saturation, Jeffery J. Roberts and Wunan Lin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2112-2120

Emergency Response Preparedness Analysis for Radioactive Materials Transportation, Emelinda M. Parentela, Shashi K. Sathisan, Sandeep S. Burli and Walter C. Vodrazka, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1249-1254.

An Evaluation of Rail Access Routes to Yucca Mountain, Shashi K. Sathisan and Emelinda M. Prarentela, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1270-1277.

Evidence for a Welded Tuff in the Rhyolite of Calico Hills, Robert P. Dickerson and W. Clay Hunter, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1861-1868.

Fluid Inclusion Studies of Calcite Veins from Yucca Mountain, Nevada, Tuffs: Environment of Formation, Edwin Roedder, Joseph F. Whelan and David T. Vani-man, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1854-1860.

A Gas Sampling System for Withdrawing Humid Gases Oas Sampling System to Humanus Prom Deep Boreholes, Joseph P. Rousseau, William Thordarson and Mark A. Kurzmack, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2139-2145.

Gravity and Megnetic Investigations of Yucca Wash, Southwest Nevada, V. E. Langenheim and D. A. Ponce, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2272-2278.

Ground-Water Recharge in Fortymile Wash Near Yucca Mountain, Nevada, 1992-93, Charles S. Savard, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1805-1813.

Growing Interest, Growing Programs, Growing Pains: Successfully Customizing Public Outreach, Mindy Wadkins, Carleen Hill and Theresa Hirsch, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p232-237.

A Health Risk Based Approach for HLW Repository Envi-ronmental Protection Criteria, R. F. Williams, R. L. Yang, R. McGuire and R. E. Wilems, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1435-1450.

Hydrologic Property Alterations Due to Elevated Temperatures at Yucca Mountain, A. L. Flint, M. H. Nash and M. S. Nash, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2101-2105.

Identifying Significant Uncertainties in Thermally Dependent Processes for Repository Performance Analysis, James D. Gansemer and Alan Lamont, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2197-2206.

Implications of Theories of Asteroid and Comet Impact for Policy Options for Management of Spent Nuclear Fuel and High-Level Radioactive Wastes, Newell J. Trask, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1324-1328.

In Situ Stress Determination Research Study, William G. Austin and Paul M. Thompson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2429-2436.

Integrated Geology and Preliminary Cross Section Along the North Ramp of the Exploratory Studies Facility, Yucca Mountain, D. C. Buesch, R. P. Dickerson, R. M. Drake and R. W. Spengler, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1055-1065

Integrating Scientific Results for a Post-Closure Safety Demonstration, Edward C. Taylor, Lawrence D. Ram-spott, Scott Sinnock and William M. Sprecher, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p301-305.

- Isotopic Studies of Yucca Mountain Soil Fluids and Carbonate Pedogenesis, Ted A. McConnaughey, Joseph F. Whelan, Kimberley P. Wickland and Richard J. Moscati, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2584-2589.
- Isotopic Tracers of Gold Deposition in Paleozoic Limestones, Southern Nevada, Z. E. Peterman, B. L. Widmann, B. D. Marshall, J. N. Aleinikoff, K. Futa and S. A. Mahan, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1316-1323.
- Kwicklis, Edward M. Alan L. Flint and Richard W. Healy, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2341-2351.
- Late Cenozoic Evolution of Fortymile Wash: Major Change in Drainage Pattern in the Yucca Mountain, Nevada Region During Late Miocene Volcanism, Scott C. Lundstrom and Richard G. Warren, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2121-2130.
- Late Glacial Climate Estimates for Southern Nevada the Ostrocode Fossil Record, Richard M. Forester and Alison J. Smith, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2553-2561.
- Late Glacial to Modern Climate Near Yucca Mountain Nevada, Richard M. Forester, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2750-2754.
- Late Holocene Climate Derived From Vegetation History and Plant Cellulose Stable Isotope Records From the Great Basin of Western North America, Peter E. Wigand, Martha L. Hemphill and Sikha (Manna) Patra, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2574-2583.
- Mechanical and Bulk Properties in Support of ESF Design Issues, R. H. Price, R. J. Martin, III, P. J. Boyd and J. S. Noel, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p
- Modeling a Ponded Infiltration Experiment at Yucca Mountain, NV, David B. Hudson, Alan L. Flint and William R. Guertal, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2168-2174.
- Modeling Heretogeneous Unsaturated Porous Media Flow at Yucca Mountain, Thomas H. Robey, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2678-2684.
- Molluscs as Climate Indicators: Preliminary Stable Isotope and Community Analysis, Saxon E. Sharpe, Joseph F. Whelan, Richard M. Forester and Ted McConnaughey, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p.2538-2544.
- Mounted Tower Crane Rises Above Tight Jobsite, CE Oct. 94, p10.
- The Nevada Statewide Radioactive Materials Transportation Plan, Maria Ardila-Coulson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p150-157.
- Oil and Gas Exploration Near Yucca Mountain, Southern Nevada, John A. Grow, Charles E. Barker and Anita G. Harris, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1298-1315.
- On the Benefits of an Integrated Nuclear Complex for Nevada, James A. Blink and William G. Halsey, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p18-25.
- Paleoclimate Validation of a Numerical Climate Model, F. Joseph Schelling, Hugh W. Church, Bernard D. Zak and Starley L. Thompson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2746-2749.

- Petrographic and Geochemical Characteristics of a Section Through the Tiva Canyon Tuff at Antler Ridge, Yucca Mountain, Nevada, Frances R. Singer, Frank M. Byers, Jr., Beth L. Widmann and Robert P. Dickerson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1869-1879.
- Phenomenological Studies of Two-Phase Flow Processes for Nuclear Waste Isolation, Karsten Pruess, Stefan Finsteric, Peter Persoff and Curt Oldenburg, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2639-2647.
- Planning and Management of Change, Robert M. Nelson, Jr., C. Thomas Statton and Robin K. St. Clair, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1722-1730
- Population Estimation Techniques for Routing Analysis, Shashi K. Sathisan and Anil K. Chagari, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p658-665.
- Potential Economic Benefits of the Yucca Mountain Project, Richard A. Babcock, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p642-649.
- Preliminary Analysis of Three-Dimensional Moisture Flow Within Yucca Mountain, Nevada, Gudmundur Bodvarson, Gang Chen and Caroline Wittwer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p.2038-2047.
- A Preliminary Characterization of the Spatial Variability of Precipitation at Yucca Mountain, Nevada, Joseph A. Hevesi, Dale S. Ambos and Alan L. Flint, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2520-2529.
- Preliminary Results of Paleoseismic Investigations of Quaternary Faults on Eastern Yucca Mountain, Nye County, Nevada, C. M. Menges, J. R. Wesling, J. W. Whitney, F. H. Swan, J. A. Coe, A. P. Thomas and J. A. Oswald, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2373-2390.
- Preliminary U-Series Disequilibrium and Thermoluminescence Ages of Surficial Deposits and Paleosols Associated with Quaternary Faults, Eastern Yucca Mountain, J. B. Paces, C. M. Menges, B. Wildmann, J. R. Wesling, C. A. Bush, K. Futa, H. T. Millard, P. B. Maat and J. W. Whitney, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2391-2401.
- Public Opinion Polling and the Yucca Mountain Controversy: A Seven Year Inventory (12:86-893), Jeffery J. Himmelberger and Mike L. Baughman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p142-149.
- Published Attenuation Functions Compared to 6/29/1992. Little Skull Mountain Earthquake Motion, Renner B. Hofmann and Abou-Bakr K. Ibrahim, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2402-2408.
- Radiation Effects from Uranium Ore Bodies, James O. Duguid, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1337-1343.
- Rationale for Determining Spent Fuel Acquisitions for Repository Testing, Steven C. Marschman, Robert E. Einziger and Ray B. Stout, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1074-1079.
- Repository Program Licensing Approach, Thomas M. Williamson and April VanCamp Gil, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1585-1592.
- Results of Air-Permeability Testing in a Vertical Borehole at Yucca Mountain, Nevada, G. D. LeCain and J.N. Walker, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2782-2788.

The Role of Fracture Coatings on Water Imbibition Into Unsaturated Tuff, Vijay S. Chekuri, Scott W. Tyler and John W. Fordham, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p. 1891–1896.

Scaling Behavior of Gas Permeability Measurements in Volcanic Tuffs, Vincent C. Tidwell, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2500-2509.

Selenite Transport in Unsaturated Tuff From Yucca Mountain, James L. Conca and Ines R. Triay, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2175-2182.

Shallow Infiltration Processes in Arid Watersheds at Yucca Mountain, Nevada, Lorraine E. Flint, Alan L. Flint and Joseph A. Hevesi, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2315-2322.

Site Characterization and Related Activities at the Potential High-Level Radioactive Waste Repository Site at Yuca Mountain, Nevada, Carl P. Gertz, Paul L. Cloke, Robert M. Nelson, Jr. and Maxwell B. Blanchard, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2291-2296.

Some Results from the Second Iteration of Total-System Performance Assessment for Yucca Mountain, Michael L. Wilson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1655-1662.

Spring Deposits and Late Pleistocene Ground-Water Levels in Southern Nevada, Jay Quade, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2530-2537.

Start-ups, CE Apr. 94, p8.

Strontium Isotope Geochemistry of Soil and Playa Deposits Near Yucca Mountain, Nevada, Brian D. Marshall and Shannon A. Mahan, (High Level Radioactive Waste Management, High Level Radioactive Waste Frogram Committee, 1994), p2685-2691.

Structural Character of the Northern Segment of the Paintbrush Canyon Fault, Yucca Mountain, Nevada, Robert P. Dickerson and Richard W. Spengler, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2367-2372.

Subsurface Transport Modeling of the Savannah River and Yucca Mountain Sites, Bryan E. Dunlap, Darrell W. Pepper and Dale E. Stephenson, *(High Level Radioactive Waste Management*, High Level Radioactive Waste Program Committee, 1994), p1848-1853.

The Sundance Fault: A Newly Recognized Shear Zone at Yucca Mountain, Nevada, R. W. Spengler, C. A. Braun, L. G. Martin and C. W. Weisenberg, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2359-2366.

Systems Engineering Applied to the Development of the Yucca Mountain Project Design Requirements Downments, M. Sam Rindskopf and Dennis C. Royer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1634-1640.

Testing Conceptual Unsaturated Zone Flow Models for Yucca Mountain, Tim P. Brown, Linda L. Lehman and John L. Nieber, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1999-2006.

Testing the Spatial Neutrality of the REMI Net Migration Equation, Charles F. Barr, Nasser Daneshvary, Thomas A. Perrigo and Dan S. Rickman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p40-47.

Thermal and Seismic Impacts on the North Ramp at Yucca Mountain, M. Lin, M. P. Hardy and J. Jung, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1971-1978.

Thermal Response of the Waste Package/MPC and EBS, Robert H. Bahney. III and Thomas W. Doering. (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p809-815. Threshold Precipitation Events and Groundwater Recharge, Richard H. French and Roger L. Jacobson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p298-302.

Tree-Rings and Climate: Implications for Great Basin Paleoenvironmental Studies, Donald A. Graybill, M. R. Rose and Fred L. Nials, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Com-

mittee, 1994), p2569-2573.
U. S. NRC Staff Views on the Technical Bases for Yucca Mountain Standards, Margaret V. Federline, Janet P. Kotra and James R. Firth, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1422-1428.

An Updated Fracture-Flow Model for Total-System Performance Assessment of Yuca Mountain, John H. Gauthier, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1663-1670.

Urban Versus Rural Risk Perception Relating to High-Level Nuclear Waste, Dennis L. Soden, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), pl 36-141.

waste Program Committee, 1994), p136-141.
Use of An Analog Site Near Raymond, California, To Develop Equipment and Methods for Characterizing a Potential High-Level, Nuclear Waste Repository Site at Yucca Mountain, Nevada, Amjad M. J. Umari, Arthur Geldon, Gary Patterson, James Gemmell, John Earle and Jon Darnell, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2413-2422.
The Use of Expert Indoment Elicitation to Decider Expert

The Use of Expert Judgment Elicitation to Predict Future Climate for the Yucca Mountain Nevada Vicinity, Aaron DeWispelare, Michael P. Miklas, Jr., A. Berge Gureghian, L. Tandy Herren, Robent T. Clemen and James R. Park, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1614-1621.

Ventilation Considerations for Repository Subsurface Advanced Conceptual Design, Hang Yang and Kalyan K. Bhattacharyya, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p530-537.

Verification of A 1-Dimensional Model for Predicting Shallow Infiltration at Yucca Mountain, Joseph A. Hevesi, Alan L. Flint and Lorraine E. Flint, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2323-2332.

Waste Package Materials Selection Process, Ajit K. Roy, Robert L. Fish and R. D. McCright, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p993-999.

What Do We Mean By a "Cold Repository"? William G. Halsey, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2183-2188.

 1994), p2183-2188.
 Yucca Mountain: A Potential Trade-Off in Radiological Hazards, P. Spiegler, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1959-1963.

New England

Earthquake-Induced Settlements in Silty Sands for New England Seismicity, Cetin Soydemir, Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p77-90.

Evaporation and Evapotranspiration under Climate Change in New England, Neil M. Fennessey and Paul H. Kirshen, WR Jan./Feb. 94, p48-69.

New Hampshire

Cities Beware: Bidders Must be Treated Equally, CE June 94, p30.

New Jersey

Design and Implementation, Brian May, Douglas Pabst and Scott McDowell, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1027-1036.

Dioxin Contamination in Sediments of the Port of New York and New Jersey: The Search for Criteria, John F. Tavolaro and Joseph Olha, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p150-159.

Disposal of Contaminated Sediments in NY/NJ Harbor, Joel A. Pecchioli, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p606-615.

Ed., 1994), pool-offs.
Historical Considerations for New Jersey Viaduct, Dennis V. Brizick, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p302-307.

Land Development Regulations: Roadblock to Affordable Housing, Thomas J. Olenik and S. L. Cheng, UP Mar. 94, p22-27.

New Jersey May Have Best-Managed Highways (ltr), CE Apr. 94, p30.

Recent Assessment and Decontamination Studies of Contaminated Sediments in the New York/New Jersey Harbor, Eric Stern, Joseph Olha, Audrey A. Massa and Bryce Wisemiller, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p458-467.

Soil-Cover Success, Issa S. Oweis, George Dakes, Thomas Marturano and Richard Wierer, CE Oct. 94, p58-59.

Start-ups, CE Nov. 94, p8.

This Project's for You, CE Apr. 94, p8.

Treatment of Drinking Water Containing Bromate and Bromide lons, Taha F. Martaba and Steven J. Medlar, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p476-483.

Wind-Driven Dispersion in New Jersey Coastal Waters, A. K. M. Quamrul Ahsan, Michael S. Bruno, Lie-Yauw Oey and Richard I. Hires, HY Nov. 94, p1264-1273.

New York City

ASCE Leaders Chart a Path for Rebuilding U.S. Infrastructure, NE July 94, p1-2.

Brooklyn Battery Tunnel Rehab is Under Way, CE May 94, p28.

Calibration of a Highway Traffic Assignment Model for the Manhattan Central Business District, V. Papayannoulis, J. C. Falcocchio and L. Maynus, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p720-727.

Design and Analysis of the 712 Fifth Avenue Structure, Louis A. Occhicone and Stanley Wojnowski, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p1556-1561.

East River Modeling of Water Quality for Multiple-Project Assessments, Guy Apicella, Robert Norris, Johanna Newton, Walter Ewald and Angelika Forndran, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p235-248. Fiber Wraps Migrate East, CE July 94, p11.

Foundation Set Up to Aid ASCE's Relocation to Washington Area; Deane Named Its President, NE Sept. 94, p1.Fresh Kills to Get Fresher Leachate, CE June 94, p20.

GIS Proves Invaluable in New York Watershed Study, Foster Nichols, CC June 94, p1,7-9.

Jacket Arrest Cracking of Prison Bridge Piles, CE Dec. 94, p14,16-17.

James E. Davis to Be ASCE's Next Executive Director, NE May 94, p1.

Laying Groundwork for Future Engineers, CE Dec. 94, p8. Safety Analysis of Suspension-Bridge Cables: Williamsburg Bridge, John Matteo, George Deodatis and David P. Billington, ST Nov. 94, p3197-3211.

Structural Assessment of Bomb Damage for World Trade Center, Ennala Ramabhushanam and Marjorie Lynch,

CF Nov. 94, p229-242.

Trapped in an Elevator during the World Trade Center Bombing: A Personal Account, Satinder P. S. Puri, CF Nov. 94, p217-228.

New York, State of

The December 1992 Storm at the New York Mud Dump Site, Scott McDowell, Brian May and Douglas Pabst, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p786-795.

Demonstration of Equipment for Dredging Contaminated Sediments at Buffalo River, Buffalo, New York, B. Thomas Kenna, Daniel E. Averett, Paul A. Zappi and Stephen M. Yaksich, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p885-894. Design of Manning's-Rougness-Coefficient Study in New York State, William F. Coon, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p677-681.

Dioxin Capping Management and Monitoring Program: Design and Implementation, Brian May, Douglas Pabst and Scott McDowell, (*Dredging '94*, E. Clark McNair,

Jr., ed., 1994), p1027-1036.

Dioxin Contamination in Sediments of the Port of New York and New Jersey: The Search for Criteria, John F. Tavolaro and Joseph Olha, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p150-159.

Disposal of Contaminated Sediments in NY/NJ Harbor, Joel A. Pecchioli, (*Dredging '94*, E. Clark McNair, Jr.,

ed., 1994), p606-615.

Effects of Flow Duration on Local Scour at Bridge Piers in New York, Gerard K. Butch and Richard Lumia, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p46-50.

Performance of New York's Long-span Bridges, Satinder P. S. Puri, Richard J. Kratky and Maria Grazia Bruschi, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p1022-1031.

Private Cogeneration Plant Flies at JFK Airport, CE Sept. 94, p22.

Quake an Act of (Human) Nature?, CE June 94, p8.

Recent Assessment and Decontamination Studies of Contaminated Sediments in the New York/New Jersey Harbor, Eric Stern, Joseph Olha, Audrey A. Massa and Bryce Wisemiller, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p458-467.

Roughness Coefficients for High-Gradient Channels in New York State, William F. Coon, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p722-726.

Start-ups, CE Dec. 94, p8.

Water Stop Aids Hudson Rehab, CE June 94, p91.

New Zealand

Environmental Mediation and Open-Water Disposal, Joseph D. Germano, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p160-169.

A Speed Prediction Model for New Zealand Highways, Christopher R. Bennett and Roger C. M. Dunn, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p728-734.

Niagara River

Building A Barrier Wall Through Boulders, Donald R. McMahon, Michael J. Mann and Robert C. Tulett, CE Oct. 94, p60-62.

A. Lagrangian Model for Surface Buoyant Jets, Maneesha Joshi and J. F. Atkinson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p487-491.

Uncertainties in Flow Modeling and Forecasting for Niagara River, Randy D. Crissman, Chao-Lin Chiu, Weizu Yu, Kazumasa Mizumura and Ion Corbu, HY Nov. 93, p1231-1250.

Nigeria

Admixture Applications in Large Concrete Pours, Augustine Uchechukwu Elinwa, MT Aug. 94, p352-356.

Nile Rive

Application of the FESWMS-2DH Software to Solve the Navigation Problem at EL-Menya Bridge in Egypt, Khaled Kheireldin, Ahmed Fahmey and Mohamed Gasser, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1244-1250.

Calibration of Movable Bed Model for Armant Area, F. S. El-Gamal and A. F. Ahmed, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p119-128.

Hybrid Noninertia and Statistical Model Versus Hydrodynamic Routing, Hussam E. S. Fahmy and Hubert J. Morel-Seytoux, HY June 94, p706-721.

A Satellite Based River Forecast System for the Nile River, Victor Koren and Curtis B. Barrett, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p9-12. Water Balance of Blue Nile River Basin in Ethiopia, Peggy A. Johnson and P. Douglas Curtis, IR May/June 94, p573-590.

Nitrates

Biological Upflow Fluidized Bed Denitrification Reactor Demonstration Project-Stamford, Ct. Jeannette Semon, Thomas Sadick, Dennis Palumbo, Richard Schede, Marylee Santoro, Marvin Schneider and Steven Lesando, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p428-435.

Biotransformation of Pesticides in Simulated Groundwater Columns, Gregory G. Wilber and Stuart R. Garrett, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p368-375.

Denitrification Inhibition by High Nitrate Wastes, W. Vey-dovec, J. Silverstein, N. E. Cook, Jr., L. A. Figueroa, R. Hund and G. D. Lehmkuhl, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p415-422.

Kinetics of Monochloramine Reactions with Nitrate, Oliver J. Hao, Chung M. Chien and Richard L. Valentine, EE

July/Aug. 94, p859-874.

Long-Term Simulation of Decreased Acid Loading on For-ested Watershed, Todd H. Rees and Jerald L. Schnoor, EE Mar./Apr. 94, p291-312.

A model to describe the fate of agricultural pollutants, A. Pinheiro and B. Caussade, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p170-174.

Nitrification

Analysis of Biomass Distribution and Chemical Interactions in Nitrifying Biofilms, Edna M. C. V. Flora, Joseph R. V. Flora, Makram T. Suidan and Byung J. Kim, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p305-312

Effect of Acid Orange 7 on Nitrification Process, Yongjie He and Paul L. Bishop, EE Jan./Feb. 94, p108-121.

Factors Affecting Nitrite Buildup in Submerged Filter Sys-tem, Oliver J. Hao and Jin M. Chen, EE Sept./Oct. 94,

KBES for Process Control of Nitrification in Activated Sludge Process, Naci H. Ozgur and Michael K. Sten-

strom, EE Jan./Feb. 94, p87-107.

Modeling of Chemical Inhibition of Nitrification, Robert W. Okey and H. David Stensel, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p297-304.

Nitrification in Single-Stage Trickling Filters, Rao Y. Surampalli, O. Karl Scheible and Shankha K. Banerji, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p694-

Factors Affecting Nitrite Buildup in Submerged Filter System, Oliver J. Hao and Jin M. Chen, EE Sept./Oct. 94, p1298-1307.

Nitrogen

Non-Point Pollution Loadings and their Impacts on Tennessee Valley Reservoirs, Julia Burr Avera and John A. Gordon, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1247-

Non-Point Source Pollution Reduction, J. Thomas Franques and Rhonda L. Townsend, (Hydraulic Engi-neering '94, George V. Cotroneo, ed. and Ralph R. Ru-

mer, ed., 1994), p1252-1256.

Nutrient Leaching from Alfalfa Irrigated with Municipal Wastewater, Scott F. Korom and Roland W. Jeppson, EE Sept./Oct. 94, p1067-1081.

Nitrogen compounds

Biodegradation of 2,4-Dinitrotoluene in a Two Stage System, S. L. VanderLoop, M. T. Suidan, M. A. Moteleb and S. W. Maloney, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p710-717. Effects of Molecular Oxygen and pH on the Adsorption of Aniline to Activated Carbon, Peter Fox and Kamalesh Pinisetti, (Critical Issues in Water and Wastewater

Prinisetti, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p617-623.
Photocatalytic Transformations and Degradation of 2.4.6-trinitrotoluene (TNT) in TiO2 Slurries, Daniel C. Schmelling and Kimberly A. Gray, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p751-755.
Pressivized Photocatalysis of a Miyed Reactant System

The Sensitized Photocatalysis of a Mixed Reactant System of 4-Chlorophenol and 4-Nitrophenol, Melissa S. Dieckmann, Kimberly A. Gray and Prashant V. Kamat, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p726-732

Nitrogen removal

Automated ORP Control for Aerobic/Anoxic Cycling in Oxidation Ditch Treatment, Thomas E. Coleman, H. David Stensel, Darrel Fleischman and W. Brent Denham, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p444-

Biological Upflow Fluidized Bed Denitrification Reactor Demonstration Project-Stamford, Ct. Jeannette Semon, Thomas Sadick, Dennis Palumbo, Richard Schede, Marylee Santoro, Marvin Schneider and Steven Lesando, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p428-435.

Regional Optimization of Non-Point Source Load Reduc-tion, J. Thomas Franques and Rhonda L. Townsend, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p262-266.

Naise

Identification and Uncertainty Estimation of Structural Parameters, C. G. Koh and L. M. See, EM June 94, p1219-

A Study of Communication Signal Leakage Through the Study of Colimination Signal Ecasage Finding the Earth's Ionosphere Using Ray-Tracing Techniques, M. McCoy and J. P. Basart, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p553-561.

Noise reduction

Asphalt-Rubber Hot Mix in Road Rehabilitation, Kirk L. Beaty, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p319-326.

Nomographs

Novel Design Algorithms for K Factor Calculation and Beam-Column Selection, N. Agbayani, P. Jayachandran and D. Sriram, ST Dec. 93, p3630-3648.

Nondestructive tests

Acoustic Emission Monitoring of Fatigue Crack Growth in HSLA-80 Steel Box Beams, Stephen Pessiki and Steven Derrah, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1334-1339.

Acoustic Emission Monitoring of Steel Bridges, A. K. Maji and T. Kratochvil, (Structures Congress XII, N. C Baker, ed. and Barry J. Loodno, ed., 1994), p1322-1327.

Acoustic Emission Testing of Fiberglass Molded Grating, Kenneth Berg and J. Frank Mayfield, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p131-138.

Advancement of Material Handling Technologies for In-Place Asphalt Pavement Recycling, Sotiris A. Pagdadis and Ilan Ishai, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p365-373.

Application of Nondestructive Evaluation to Wood Poles, Ronald W. Anthony and Jozsef Bodig, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p669-676.

Automated Surface Wave Method: Inversion Technique, Deren Yuan and Soheil Nazarian, GT July 93, p1112-1126

Element-Level System Identification with Unknown Input, Duan Wang and Achintya Haldar, EM Jan. 94, p159-

The Engineer As Preservationist, Marie Ennis, CE Sept. 94, p48-51.

Estimation of Pavement-Layer Moduli Using Nonlinear Optimization Technique, Mustaque Hossain, John Zaniewski and Subramaniam Rajan, TE May/June 94,

Experiences with an Undergraduate Structural Engineering Laboratory, Stephen Pessiki, Le-Wu Lu and Ben T. Yen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1369-1374.

Fiber-Optic Bragg Grating Sensor for Nondestructive Evaluation of Composite Beams, Benxian Chen, M. H. Maher and Edward G. Nawy, ST Dec. 94, p3456-3470.

Impact of Weight Falling onto the Ground, Jose M. Roesset, Eduardo Kausel, Vicente Cuellar, Jose L. Monte and Julian Valerio, GT Aug. 94, p1394-1412.

In-Place Determination of Concrete Strength by the Impact-Echo Method, Stephen Pessiki and Matthew Johnson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1340-1345.

In-Situ Nondestructive Testing of Buried Precast Concrete Pipe, Dennis A. Sack and Larry D. Olson, (Infrastructure: New Materials and Methods of Repair, Kim D.

Basham, ed., 1994), p499-507.

Inspection and Repair of a Timber Truss Bridge - An Application of Nondestructive Testing, Norbert J. Volny, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p654-661.

Interpretation of Nondestructive Integrity Tests Using Artificial Neural Networks, Glenn J. Rix, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p1346-1351.

Laser Generation and Detection of Ultrasound in Concrete, Laurence J. Jacobs, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1328-1333.

Load Transfer Determination for Airfield Pavements Using the Falling Weight Deflectometer, Michael I. Hammons and David W. Pittman, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p523-530

Maintaining Reliability of Concrete Structures. I: Role of Inspection/Repair, Yasuhiro Mori and Bruce R. Elling-wood, ST Mar. 94, p824-845.

Maintaining Reliability of Concrete Structures. II: Optimum Inspection/Repair, Yasuhiro Mori and Bruce R. Ellingwood, ST Mar. 94, p846-862.

NDE for Steel Bridges, Steven B. Chase, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1203-1208.

NDE for Steel Bridges: FHWA Research, Past, Present and Future, Steven B. Chase, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1060-1064.

NDT Methods for Flaw Detection in Concrete, Nicholas J. Carino, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p175-192

Nondestructive Evaluation of Wood, Robert J. Ross and Roy F. Pellerin, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1233-

Remote Sensing Pipeline Rehabilitation Methodologies Based Upon the Utilization of Infrared Thermography, Gary J. Weil, Richard J. Graf and Leann M. Forister, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p173-181.

Rigid Pavement Evaluation with Seismic Pavement Analyzer, S. Nazarian, M. Baker and K. Crain, (Infrastructure: New Materials and Methods of Repair, Kim D.

Basham, ed., 1994), p508-515.

Timber Pile Length Determination Using a Nondestructive Technique, Robert T. Brooks and Allan G. Burk, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p952-957.

Vibration Testing for Nondestructive Evaluation of Bridges. I: Theory, Mahmod M. Samman and Mrinmay Biswas, ST Jan. 94, p269-289.

Vibration Testing for Nondestructive Evaluation of Bridges. II: Results, Mahmod M. Samman and Mrinmay Biswas, ST Jan. 94, p290-306.

Nonlinear analysis

Advanced Nonlinear Formulation for Reinforced Concrete Beam-Columns, B. A. Izzuddin, C. G. Karayannis and A. S. Elnashai, ST Oct. 94, p2913-2934. Analysis and Design of a Double Layer Barrel Vault with a

Large Span, Ruo Jun Qian and Zu Yan Shen, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p401-408.

Analysis of Composite Panels Using Newton's Method, Norman F. Knight, Jr., (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and

Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p147-155.

Application of Adaptive Analysis to Reinforced Concrete Frames, C. G. Karayannis, B. A. Izzuddin and A. S. Elnashai, ST Oct. 94, p2935-2957.

Application of NLFM Models to Predict Cracking in Concrete Gravity Dams, Sudip S. Bhattacharjee and Pierre Léger, ST Apr. 94, p1255-1271.

Cable Systems with Flastic Supporting Elements, James W.

Cable Systems with Elastic Supporting Elements, James W. Charland, Alan G. Hernried and Marvin R. Pyles, ST Dec. 94, p3649-3665.

Characteristics of Solitary Wave Breaking Induced by Breakwaters, Stéphan T. Grilli, Miguel A. Losada and Francisco Martin, WW Jan/Feb. 94, p74-92.

Collapse Load Calculated by Probability Based Analysis Compared to Full Scale Tower Test Results, Thien T. De Michael D. Mill Lose Tower Test Results, Thien T.

Do, Michael D. Miller, Leon Kempner, Jr., Troy D. Lyver and Wendelin H. Mueller, III., (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p48-59. Connections for Pultruded Composites: A Review and

Evaluation, Ayman S. Mosallam, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed.,

1994), p1001-1017.

Consolidation of Clay Layer: Hydrogeologic Boundary Conditions, Robert L. Schiffman, John M. McArthur and Robert E. Gibson, GT June 94, p1089-1093.

Developing Retrofit Strategies for the China Basin Viaduct Foundations Using Non-linear, Hysteretic Analysis, D. R. Parker, John C. Castro and R. A. Dameron, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1839-1845.

Different Approaches to Rating Slab Bridges, Vikas Huria, Kuo-Liang Lee and Ahmet E. Aktan, ST Oct. 94, p3056-3062.

Distributed Flexibility Models for Nonlinear Analysis of RC Structures, Sashi K. Kunnath, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p145-154. Dynamic Stability of Imperfect Frames Under Joint Dis-

placements, D. S. Sophianopoulos and A. N. Kounadis, EM Aug. 94, p1661-1674. ficient Nonlinear Analysis of Column-Supported

Efficient Cylinderical Shells, P. L. Gould, R. V. Ravichandran and S. Sridharan, (Spatial, Lattice and Tension Struc-tures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p927-935. Elasto-Plastic Buckling Design for Shallow Cylindrical

Shells under External Pressure, Seishi Yamada and James G. A. Croll, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina

U. Penalba, ed., 1994), p936-945.
Estimation of Pavement-Layer Moduli Using Nonlinear
Optimization Technique, Mustaque Hossain, John
Zaniewski and Subramaniam Rajan, TE May/June 94, p376-393. Finite Element Modeling of Concrete Expansion and

Confinement, F. J. Vecchio, ST Sept. 92, p2390-2406. Flexural Response of FRP Reinforced Concrete Structures, El-Attar A. El-bar, Ibrahim M. Ibrahim and Ayman S. Mosallam, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p583-591.
Generating Reinforcement in FE Modeling of Concrete

Structures, Fariborz Barzegar and Srinivas Maddipudi,

ST May 94, p1656-1662.

Inelastic and Stability Anlysis of Flexibly Connected Steel Frames by Springs-in-Series Model, C. Y. Yau and S. L. Chan, ST Oct. 94, p2803-2819.

Large-Scale Computations in Analysis of Structures, D. B. McCallen and G. L. Goudreau, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p183-192.

Lateral Load Analysis of Single Piles and Drilled Shafts, J. Michael Duncan, Leonard T. Evans, Jr. and Phillip S. K. Ooi, GT June 94, p1018-1033.

Lateral Postbuckling Analysis of Beam-Columns, A. Kounadis and G. I. Ioannidis, EM Apr. 94, p695-706. Material Nonlinear Analysis of Thin-Walled Beams, A. Prokić, ST Oct. 94, p2840-2852.

Non-Linear Solution Methods for Shell and Spatial Struc-tures, M. Papadrakakis, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and

Celina U. Penalba, ed., 1994), p180-189.

Nonlinear Analysis and Experimental Validation of a Stiffening Truss Chord of the Golden Gate Bridge, R. A. Dameron, R. S. Dunham and J. C. Castro, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994). p1106-1114.

Nonlinear Analysis of a Reinforced Concrete Folded Plate Structure, Pattabhi Sitaram, Stuart Swartz and Chidambaram Channakeshava, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p857-866.

Nonlinear Analysis of Angle-Ply Composite and Sandwich Laminates, T. Kant and J. R. Kommineni, AS July 94,

p342-352.

Nonlinear Analysis of Prestressed Concrete Structures, Mohd-Hisham Mohd-Yassin and Filip C. Filippou, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1421-1426. Nonlinear Analysis of Space Trusses, Erling Murtha-Smith, ST Sept. 94, p2717-2736.

Nonlinear Analysis of Stiffened Laminated Cylindrical Shells Using the Layerwise Theory of Reddy, M. Savoia and J. N. Reddy, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p127-136.

Nonlinear Analysis of Structural Frameworks Using Super-Singar Analysis of Suddural Frameworks Using Super-computing Techniques, Christopher M. Foley and Sriramulu Vinnakota, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2058-2065.

Nonlinear Analysis of Two-Layered Wood Members with Interlayer Slip, Dan L. Wheat and Jose M. Calixto, ST June 94, p1909-1929.

Nonlinear Axial Interaction in Pile Dynamics, Mohamed H. El Naggar and Milos Novak, GT Apr. 94, p678-696.

Nonlinear Earthquake Analysis of Concrete Gravity Dams Including Sliding, Juan W. Chávez and Gregory L. Fenves, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p173-182.

Nonlinear Finite Deformation Analysis of Beams and Col-umns, Ronald Y. S. Pak and Eric J. Stauffer, EM Oct. 94,

p2136-2153.

Nonlinear Finite Element Analysis of Concrete Deep Beams, A. Fafitis and Y. H. Won, ST Apr. 94, p1202-1220.

Nonlinear Finite Element Analysis of Deteriorated RC Slab Bridge, B. M. Shahrooz, I. K. Ho, A. E. Aktan, R. de Borst, J. Blaauwendraad, C. van der Veen, R. H. Iding and R. A. Miller, ST Feb. 94, p422-440.

Nonlinear Finite Element Analysis of RC Slab Bridge, Vi-kas Huria, Kuo-Liang Lee and A. Emin Aktan, ST Jan.

Nonlinear Finite-Element Model for Light-Frame Stud Walls, B. Kasal and R. J. Leichti, ST Nov. 92, p3122-3135.

Nonlinear Finite-Element Model of Complete Light-Frame Wood Structures, Bohumil Kasal, Robert J. Leichti and Rafik Y. Itani, ST Jan. 94, p100-119.

Nonlinear Inelastic Analysis of Steel Beam-Columns I: Theory, Yong Lin Pi and N. S. Trahair, ST July 94, p2041-2061.

Nonlinear Inelastic Analysis of Steel Beam-Columns II: Applications, Yong Lin Pi and N. S. Trahair, ST July 94, p2062-2085.

Nonlinear Model for Building-Soil Systems, D. B. McCallen and K. M. Romstad, EM May 94, p1129-1152.

Nonlinear Model for Dynamic Axial Pile Response, Mohamed H. El Naggar and Milos Novak, GT Feb. 94, p308-329.

Nonlinear Regression Applied to Hydrologic Data, Alexander C. Demetracopoulos, IR May/June 94, p652-659.

Nonlinear Stability of Differential Surge Chambers, Xiao-Liang Yang and Chen-Shan Kung, HY Nov. 92, p1526-1539

Nonlinear Vibration Analysis of Steel Frames with Semirigid Connections, Siu Lai Chan and Goman Wai Ming Ho, ST Apr. 94, p1075-1087.

A Nonlinear-Analysis-Based Procedure for Evaluating Load-Carrying Capacity of In-Plane Steel Frames, Fumio Nishino, Buntara S. Gan and Eiki Yamaguchi, (Structures Congress XII. N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1179-1184.

Nonlinearity and Free-Surface Flow, Nazeer Ahmed, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p327-331.

On Some Hydrodynamic Effects Found in Large Scale Experiments, Nikolai S. Speranski, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p785-793.

Optimal Design Conception of Grid Domes in Practice, Xue-Ren Hu and Young-Feng Luo, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p430-439.

Optimization of Controlled Structures: Using H., Theory, N. S. Khot and D. E. Veley, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p266-275.

Pointwise Equilibrating Polynomial Element for Nonlinear Analysis of Frames, Siu Lai Chan and Zhi Hua Zhou, ST June 94, p1703-1717.

RC Beam-Column Element for Nonlinear Frame Analysis, Enrico Spacone and Filip C. Filippou, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p155-164.

Recent Advances in 3D Non-Linear FE-Analysis of R/C and P/C Beam Structures, Franz-Josef Ulm, Jean-Luc Clément and Johann Guggenberger, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1427-1432.

Seismic Behaviour of Tall Guyed Telecommunication Towers, Ghyslaine McClure and Eduardo I. Guevara, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p259-268.

Seismic Study of a Cable-Stayed Bridge, K. C. Yiak and S. Pezeshk, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1197-1207.

Mourad R. Attalla, Gregory G. Deierlein and William McGuire, ST Aug. 94, p2451-2473. Spread of Plasticity-Quasi-Plastic-Hinge

Stable Reinforced-Concrete Section-Analysis Procedure, C. R. Thewalt and B. Stojadinović, ST Oct. 94, p3012-3024.

Study on Reinforced Concrete Cylindrical Shells with Edge Members under Impact Loading, Kazuhiko Mashita, Hidehiro Yoshitake, Masaya Noguchi and Masatoshi Hotta, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p847-856.

Surface Subsidence Prediction by Nonlinear Finite-Element Analysis, Yacoub Najjar and Musharraf Zaman, GT Nov. 93, p1790-1804.

Thin-Walled Curved Beams. I: Formulation of Nonlinear Equations, Young J. Kang and Chai H. Yoo, EM Oct. 94, p2072-2101.

Thin-Walled Curved Beams. II: Analytical Solutions for Buckling of Arches, Young J. Kang and Chai H. Yoo, EM Oct. 94, p2102-2125.

Towards Robust, Effective and Efficient Second Order Analysis of Practical Steel Frames, S. L. Chan, Z. W. Zhou and W. F. Chen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1173-1178.

Wave Deformation in Front of Vertical Wall due to Wave Overtopping, Motohiko Umeyama, WW Sept./Gct. 94, p490-498.

Nonlinear differential equations

SQP Methods for Inverse Airfoil Design, Carlos Orozco and Omar Ghattas, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p297-306.

Nonlinear programming

Aquifer Remediation Design: Nonlinear Programming and Genetic Algorithms, Daene C. McKinney, Gregory B. Gages and Min-Der Lin, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p254-257.

Finite Element Limit Load Analysis by the Static Approach Using Nonlinear Programming, Hichem Smaoui, (Computing in Civil Engineering, Khalil Khozeimeh, ed.,

1994), p1936-1943.

- Genetic Algorithms Compared to Other Techniques for Pipe Optimization, Angus R. Simpson, Graeme C. Danand Laurence J. Murphy, WR July/Aug. 94, p423-
- Goal Programming Models for Determining Freshwater Inflows to Estuaries, Ning Mao and Larry W. Mays, WR May/June 94, p316-329.
- Model for Optimal Design of Reinforced Concrete Beam, B. K. Chakrabarty, ST Nov. 92, p3238-3242.
- Multiobjective Models for Determining Freshwater Inflows to Bays and Estuaries, Ning Mao, Lise LeBlanc, James Siebert, Wenchin Shi and Larry W. Mays, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p649-652.

New Methodology for Optimization of Freshwater Inflows to Estuaries, Yixing Bao and Larry W. Mays, WR Mar./

Apr. 94, p199-217.

- Optimal Control of Ground-Water Quality Management: Nonlinear Programming Approach, S. Alireza Taghavi, Richard E. Howitt and Miguel A. Mariño, WR Nov./ Dec. 94, p962-982
- Optimal Operation of Soil Aquifer Treatment System, Zongwu Tang and Larry W. Mays, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p441-444.

Optimal Rehabilitation Model for Water-Distribution Systems, Joong Hoon Kim and Larry W. Mays, WR Sept./ Oct. 94, p674-692.

Optimization of Freshwater Inflows to Lavaca-Tres Palacios, Texas, Estuary, Yixing Bao and Larry W. Mays, WR Mar./Apr. 94, p218-236.

Water-Supply Operations during Drought: Continuous Hedging Rule, Jhih-Shyang Shih and Charles ReVelle, WR Sept./Oct. 94, p613-629.

Nonlinear response

Measurements and Numerical Modelling of High Rise Building Foundations on Frankfurt Clay, Eberhard Franke, Bernd Lutz and Yasser El-Mossallamy, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1325-1336.

Nonlinear Behavior of Northlight Reinforced Concrete Shells, P. Srinivasa Rao and S. Duraiswamy, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994),

p837-846.

Nonlinear Buckling Response of Single Layer Latticed Barrel Vaults, Seishi Yamada and Takashi Taguchi, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p519-528.

Nonlinear Collapse of Offshore Jacket Structures, Helen M. Bolt, Colin J. Billington and J. Keith Ward, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p19-24.

- Nonlinear Decomposition of a 2-D Wave Field, Jun Zhang, R. E. Randall, L. Chen, C. A. Spell, J. K. Longridge and M. Ye, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994),
- Nonlinear Response of Torsionally Coupled Base Isolated Structure, R. S. Jangid and T. K. Datta, ST Jan. 94, p1-
- Nonlinear Stochastic Response and Reliability of Secondary Systems, C. D. Huang, W. Q. Zhu and T. T. Soong, EM Jan. 94, p177-196.

Nonlinear Undrained Lateral Response of Rigid Drilled Shafts Using Continuum Theory, Paul W. Mayne, Fred H. Kulhawy and Charles H. Trautmann, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p663-676.

Nonlinearity in Wave Crest Statistics, David L. Kriebel and Thomas H. Dawson, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hems-

ley, ed., 1994), p61-75.

On the Generation of Infragravity Waves by Shoaling Multidirectional Waves, Okey Nwogu, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p1-14.

Robust Active Control of Cable-Stayed Bridge Subjected to Earthquake Ground Motion, Mario E. Magaña, Alan G. Hernried and Dietmar Scheer, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p317-326.

Seismic Evaluation of the Macy Street Bridge, Los Angeles, California, Using 3-D Nonlinear Pushover Methodologies, John C. Castro and Jason S. Maxwell, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1099-1105

Strut-Tie Model Design of Disturbed Regions in Concrete Structures, Y. M. Yun, A. Alshegeir and J. A. Ramirez, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p233-238.

Viscous Damping in Inelastic Structural Response, Dionisio Bernal, ST Apr. 94, p1240-1254.

Nonlinear systems

Applicability of Pseudo-force method to Highly Nonlinear Dynamic Problems, Satish Nagarajaiah and Andrei Reinhorn, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p165-172.

Building Groundwater Optimizers That Respond to the Needs of Decision-Makers, David E. Dougherty, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p347-

Control of Hysteretic System Using Velocity and Accelera-tion Feedbacks, J. N. Yang, Z. Li and S. C. Liu, EM Nov. 92, p2227-2245.

Discontinuous Control of Seismic-Excited Nonlinear and Hysteretic Structures, J. N. Yang, Z. Li and J. C. Wu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p393-398.

Distributions of Envelope and Phase in Weakly Nonlinear Random Waves, M. Aziz Tayfun, EM May 94, p1009-

Dynamic Behavior of Nonlinear Cable System. III, Dan M. Ghiocel and Dario A. Gasparini, EM Dec. 94, p2694-

Energy Method for Nonlinear Random Vibrations in MDF Systems, Long Yun Jia, EM Apr. 94, p910-916.

Equivalent Linearization for Seismic Responses. I: Formulation and Error Analysis, Young J. Park, EM Nov. 92, p2207-2226.

First-Passage Time of Secondary System Mounted on Yielding Structure, David C. K. Chen and Loren D. Lutes, EM Apr. 94, p814-834.

Reliability of Uncertain Nonlinear Trusses Under Random Excitation. II, R.-H. Cherng and Y. K. Wen, EM Apr. 94, p748-757

Reliability of Uncertain Nonlinear Trusses Under Random Excitation. I, R.-H. Cherng and Y. K. Wen, EM Apr. 94, p733-747.

Responses of Dynamic Systems Excited by Non-Gaussian Pulse Processes, Sau-Lon James Hu, EM Sept. 93, p1818-1827.

Seismic Hazard Analysis of Nonlinear Structures. I: Methodology, Paolo Bazzurro and C. Allin Cornell, ST Nov. 94, p3320-3344.

Seismic Hazard Analysis of Nonlinear Structures. II: Applications, Paolo Bazzurro and C. Allin Cornell, ST Nov. 94, p3345-3365.

Single-Degree-of-Freedom Nonlinear Homogeneous Sys tems, José A. Inaudi, George Leitmann and James M. Kelly, EM July 94, p1543-1562.

Statistical Response of a Class of Hysteretic Systems, I. I. Orabi and G. Ahmadi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p405-410.

Steady-State Oscillation of Hysteretic Differential Model. I: Response Analysis, C. W. Wong, Y. Q. Ni and S. L. Lau, EM Nov. 94, p2271-2298.

Volterra Models of Ocean Structures: Extreme and Fatigue Reliability, S. R. Winterstein, T. C. Ude and T. Marthin-sen, EM June 94, p1369-1385.

Nonpoint pollution Combined Stormwater Drainage and Treatment, Jorge Romero-Lozano, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

A Decision Support System for Nonpoint Source Pollution Management Using a Distributed Model-GIS-DBMS Linkage, Jaewan Yoon and G. Padmanabhan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p402-409.

Development of an Experimental Watershed for Testing Development of an Experimental Watershed for Testing Nonpoint Source Pollution from Urban Runoff, Vassilios A. Tsihrintzis, Hector R. Fuentes and Rizwan Hamid, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1237-1241. Effects of Golf Course Management on Pesticide and Fertilizer Fate, S. K. Starrett, N. E. Christians and T. A. Australia.

tin, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p526-533.

Estimating Annual Urban Nonpoint Pollutant Loads, Robert D. Chandler, ME Nov./Dec. 94, p50-59.

Evaluation and Management of Non-Point Source Pollu-tants in the Lake Tahoe Watershed, G. Fred Lee and Anne Jones-Lee, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Ed-

wards, ed., 1994, p516-523.
Interfacing GIS and Water Quality Models for Agricultural Areas, Vassilios A. Tshirnitzis, Hector R. Fuentes and Rao K. Gadipudi, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

p252-256. Minimum-Impact Modeling of Nonpoint-Source Ground-water Pollution, K. Hatfield, N. Samani and R. Noss, IR

Jan./Feb. 94, p149-167.

A model to describe the fate of agricultural pollutants, A. Pinheiro and B. Caussade, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p170-174.

Non-Point Pollution Loadings and their Impacts on Tennessee Valley Reservoirs, Julia Burr Avera and John A. Gordon, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1247-

Non-Point Source Pollution Reduction, J. Thomas Franques and Rhonda L. Townsend, (Hydraulic Engi-neering '94, George V. Cotroneo, ed. and Ralph R. Ru-mer, ed., 1994), p1252-1256.

Non-Point-Source Pollution from Interrill Flow Areas, A. Parr, S. Limback, B. McEnroe and S. Zou, IR Nov./Dec.

94, p1056-1066.

Nonpoint-Pollution Model Sensitivity to Grid-Cell Size, Baxter E. Vieux and Scott Needham, WR Mar./Apr. 93, p141-157

Petroleum Hydrocarbons in Detention-Basin Sediments, Thomas J. Maldonato and Christopher G. Uchrin, EE May/June 94, p683-690.

Pollution Susceptibility of Well-Mixed Tidal Basins, Joseph L. DiLorenzo, Rhomaios V. Ram, Poshu Huang and Tavit O. Najarian, WW July/Aug. 94, p404-422.

Regional Optimization of Non-Point Source Load Reduccigorial Optimization of Non-Folin Source Losai Reduction, J. Thomas Franques and Rhonda L. Townsend, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p262-266.

Regulation of Nonpoint Sources, William Whipple, Jr., (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed.,

1994), p198-203.

Statistical Techniques for Assessing Water-Quality Effects of BMPs, John F. Walker, IR Mar./Apr. 94, p334-347.

Third Lake Watershed Assessment and Action Plan, Carey M. Brand, Gary E. Raasch and Marion E. Kessy, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p257-261.

Nonproportional loading Nonlinear Analysis of Space Trusses, Erling Murtha-Smith, ST Sept. 94, p2717-2736.

Nonuniform flow

Evaluating Flow Resistance Using Height of Roughness Protrusions, Ivana MareSová, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p712-716.

Nonuniformity

Effect of Nonuniform Stresses on Measured DSS Stress-Strain Behavior, Don J. DeGroot, John T. Germaine and Charles C. Ladd, GT May 94, p892-912.

Streambed Armoring, C. O. Chin, B. W. Melville and A. J. Raudkivi, HY Aug. 94, p899-918.

North Carolina

Factors Affecting Accuracy of Slope-Area Discharge De-termination of the September 1992 Flood in Raven Fork, Western North Carolina, W. Harold Eddins and Thomas J. Zembrzuski, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p645-649.

Field Performance of an Acoustic Scour-Depth Monitoring System, Robert R. Mason, Jr. and D. Max Sheppard, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed.,

1994), p366-375.

Simulated Circulation and Transport in Adjacent Wind-Driven Estuaries in North Carolina, Jeanne C. Robbins and Jerad D. Bales, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p105-118.

Start-ups, CE Aug. 94, p8.

North Dakota

Start-ups, CE Aug. 94, p8. Tallest Guyed Tower? Guess Again (ltr), CE Sept. 94, p30.

Tide- and Stormdriven Sediment Transport on the Inner-Shelf Along the Dutch Coast, Jan W. H. van de Meene and Leo C. van Rijn, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p822-836.

Notch sensitivity

Fracture Behavior of Cement Grouted Sand, C. Vipulanandan, A. Ata and S. Mebarkia, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p147-159.

Nuclear electric power generation

Propulsion Systems for Future Space Exploration, Michael B. Delclos, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p765-768.

Nuclear energy

Monitored Retrievable Storage: A Test of Cultural Values and A Symbol of Tribal Sovereignty, W. A. White-Tail Feather, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p68-75.

Propulsion Systems: Present and Future, John Paul Stra-chan, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p769-773.

Transfer Vehicle Sizing for Missions to Mars, James P. Masciarelli, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1355-1364.

Nuclear fuel cycle

Actinide Recycling For Reactor Waste Mass and Radiotox-icity Reduction, A. Renard, T. Maldague, S. Pilate, J. Journet, M. Rome, A. Harislur and J. Vergnes, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1682-1689

Automated Post Irradiation Handling of Spent Nuclear Fuel In PNC's FMF-2 Facility Test Hot Cell, Mark H. Price and Thomas R. Frantz, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p358-362.

Burnup Verification Using the Fork Measurement System, Ronald I. Ewing, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Com-

mittee, 1994), p732-738.

mittee, 1974, pr.32-730.
Calculation of k_{et} For Plutonium in High-Level Waste Packages, Paige R. Zielinski and William G. Culbreth, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p679-683.

po 19-50-3.
Canisters and Nonfuel Components at Commercial Nuclear Reactors, Kathy Gibbard and James Disbrow, (High Level Radioactive Waste Management, High Level Ra-dioactive Waste Program Committee, 1994), p1543-

1552

Categorization of Department of Energy Spent Nuclear Fuel, Denzel L. Fillmore, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p315-319.

Certification of a Spent Fuel Cask for Storage and Transportation, Meg Lusardi, Robert M. Bernero and Charles H. Haughney, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Commit-

tee, 1994), p1168-1173.

The Cigar Lake Analog Study: An Interational R&D Project, Jan J. Cramer and F. Peter Sargent, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2237-2242.

A Comparison of Spent-Fuel Shipping Cask Response to 10 CFR 71 Normal Conditions and Realistic Hot Day Extremes, Steven James Manson and Steven Eric Gianoulakis, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p788-795.

Comparison of Uranium Dissolution Rates From Spent Fuel and Uranium Dioxide, S. A. Steward and W. J. Gray, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p2602-2608.

Concept for Hazardous Material Management and Container Closure Using Copper Based Alloys, Holt Murray, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1000-1007.

Confirmation of MRS/MPC Transfer Facility Sizing Using Simulation Modeling, E. Scott Houston and Jennifer D. Hadley, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p1387-1392.

Decision Aids for Enhancing Intergovernmental Interac-tions: The Prenotification Analysis Support System (PASS), Marcus Lester, Edward Liebow and Judith Holm, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p168-175.

Design Basis Spent Nuclear Fuel Characteristics, Peter Gottlieb and J. Kevin McCoy, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p845-851. Developing Standardized Connection Analysis Techniques for Slim Hole Core Rod Designs, Gregory Fehr and Edmond I. Bailey, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1048-1054.

Dry Storage and Transportation of Failed Fuel, Robert D. Quinn and Brandon D. Thomas, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p949-954.

Dry Storage of Highly Enriched Uranium Fuel, D. L. Lord, J. A. Carter and L. F. Ermold, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p1131-1136.
The Effect of Fuel Type in Unsaturated Spent Fuel Tests, P.
A. Finn, M. Gong, J. K. Bates, J. W. Emery and J. C. Hoh, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1080-1087.

Effects of Axial Burnup Distributions on the Reactivity of Spent Fuel, Theodore A. Parish, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p744-751.

Engineered Barrier Environment, Yucca Mountain, Dale G. Wilder, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p1179-1187.

Excavation Damage and Organic Growth in a 1.2m Diameter Borehole, R. A. Everitt, D. A. Brown, D.M. Boychuk and P. Gann, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2092-2100.

Expected Reaction to Various Options for Spent-Fuel Storage, John Richardson, Christopher Charles and Ausra M. Richards, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p98-103.

Exploratory Studies Facility and Potential Repository Source Term, J. D. Smith, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p549-553.

Exploratory Studies Facility Test Implementation and Inte-gration with Construction and Design, Deirdre M. Boak, Ned Z. Elkins, Richard Kovach and Ronald D. Oliver, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1770-1773

Fabrication and Testing of High Strength, High Capacity, Weight Optimized Trailers, Chad Taylor, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p931-933.

Fabrication Options for Depleted Uranium Components in Shielded Containers, Susan B. Derrington, James E. Thompson and Cameron W. Coates, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p942-948.

Feasibility of Using MPCs for DOE Research and Produccasionity of Using MPCs for DOE Research and Production Fuel, Daryl A. Lopez and David G. Abbott, (*High Level Radioactive Waste Management*, High Level Radioactive Waste Program Committee, 1994), p457-466.

The First Multipurpose Spent Fuel Container Reviewed by the U.S. Nuclear Regulatory Commission (USNRC), Ivan F. Stuart, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p467-476.

Fitted Analytical Expressions Giving the Enrichment in U235 of a Fresh Fuel Equal to a Spent PWR Fuel, J. Anno, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p757-764.

Focus on High-Level Waste Repository Management and Regulation a Rate Regulator's Perspective, Emmit J. George, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1521-1524.

FY93 Thermal Loading Systems Study, Steven F. Saterlie and Brent H. Thomson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p573-585.

High Level Waste Disposal and Reprocessing in the UK, Nicholas L. Griffin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1690-1695.

High-Burnup/Low Cooling-Time Fuel Carrying Capacity of the GA-4 and GA-9 Spent Fuel Shipping Casks, J. K. Boshoven and J. E. Hopf, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p913-917.

Impact of Nuclear Waste Traffic on Highways, Peter E. Sebaaly, Raj Siddharthan and Jon A. Epps, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1255-1262

Implementation of Response Function Concept for Spent Fuel Cask Analyses, C.-K. Chris Wang, Jack W. Foster and Dominique Napolitano, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p752-756.

Implementation of Spent Fuel Storage Options - A Utility Project Engineers Perspective, Steven M. Unikewicz, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p370-374.

Implications of Theories of Asteroid and Comet Impact for Policy Options for Management of Spent Nuclear Fuel and High-Level Radioactive Wastes, Newell J. Trask, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1324-1328.

Improved Thermal Source Term Generation Capability for Use in Performance Assessment and System Studies, John King and Carol Rhodes, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p627-633.

Incorporating Stakeholder Values in Systems Engineering Decision Making, Philip M. Altomare, Michael L. Grygiel and Bernard G. Morais, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p1762-1769.

- Interfaces Between Transport and Geologic Disposal Systems for High-Level Radioactive Wastes and Spent Nuclear Fuel—A New International Guidance Document, R. B. Pope, K. W. Han, T. Pollog, L. Baekelandt, D. Blackman, J.-M. Hoorelbeke and J. E. Villagran, (*High* Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1229-
- Interlaboratory Comparison of UO2 Dissolution Rates, W. J. Gray, J. C. Tait, S. A. Steward and D. W. Shoesmith, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2597-2601.
- Kumar, Prasanna N. Jeffrey R. Williams, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1365-1371.
- Long Term Nuclear Criticality Potential in Waste Packages, Daniel A. Thomas and Thomas W. Doering, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p838-844.
- The Long Term Radioactive Storage Alternative, Cyril W. Draffin, Jr., Richard G. Little and Richard Blauvelt, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),
- Long-Term Effects of Neutron Absorber and Fuel Matrix Corrosion on Criticality, William G. Culbreth and Paige R. Zielinski, (High Level Radioactive Waste Manage ment, High Level Radioactive Waste Program Committee, 1994), p634-641.
- Making Sense of a Sensitive Issue, Stan Reid, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p217-223.
- Management of HFIR Spent Fuel, Victoria M. Green, John M. Begovich, A. L. Lotts and George F. Flanagan, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p338-342.
- Material Condition of Underwater Fuel and Storage Equipment, A. P. Hoskins, J. G. Scott, C. V. Shelton-Davis and G. E. McDannel, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1117-1123.
- Monitored Retrievable Storage/Multi-Purpose Canister Analysis: Simulation and Economics of Automation, Phil C. Bennett and Joe B. Stringer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p363-369.
- Monitored Retrievable Storage: A Test of Cultural Values and A Symbol of Tribal Sovereignty, W. A. White-Tail Feather, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p68-75.
- NEPA Implementation: The Department of Energy's Program to Manage Spent Nuclear Fuel, Dillard B. Shipler, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1532-1537.

The Nuclear Regulatory Commission's Trojan Nuclear Power Plant Seismic Design Licensing Case as an Anarower Praint Sessinic Design Licensing Case as an Anato-log to Alternative Repository Licensing Strategies, Mau-rice Axelrad and Michael A. Bauser, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p.1573-1577. A Numerical Study of Convection Heat Transfer Within Enclosed Horizontal Rod-Bundles, M. Keyhani and L.

Luo, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p780-787.

Paper Summary Inventory Assessment of DOE Spent Nuclear Fuels, David G. Abbott, Alan R. Bringhurst and Denzel L. Fillmore, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p320-330.

Performance Assessment Model of a Single Waste Package, William J. O'Connell, Tzou-Shin Ueng and Lynn C. Lewis, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p1188-1194.

Performance Assessment of the Copper/Steel Canister, Patrik Sellin, Torsten Eng and Lars Werme, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1020-1029.

Performance Assessment of the INEL Spent Fuel and HLW in Two Hypothetical Repositories, Larry L. Taylor, Robert P. Rechard, Henry H. Loo, Ronald D. Klinger and Leonard F. Ermold, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1508-1513.

Policy Issues of Transporting Spent Nuclear Fuel by Rail, H. Barry Spraggins, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p163-167.

Prediction of Cladding Life in Waste Package Environments, J. Kevin McCoy and Thomas W. Doering, (High Level Radioactive Waste Management, High Level Ra-

dioactive Waste Program Committee, 1994), p565-572.

Preliminary Spent LWR Fuel Oxidation Source Term Model, R. E. Einziger, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p554-559. PWR Axial Burnup Profile Database, R. J. Cacciapouti, S. WR Axial Burnup Fronte Database, N. J. Cate and Van Volkinburg and L. A. Hassler, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p739-743.

Radiological Characterization of Hanford HLW Tank Farm Core Samples, Vojislav Banjac and A. Sharif Heger, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1110-1116.

Radionuclide Release Rates From Natural Analogues of Spent Nuclear Fuel, D. B. Curtis, J. Fabryka-Martin, P. Dixon, R. Aguilar and J. Cramer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2228-2236.

Rationale for Determining Spent Fuel Acquisitions for Repository Testing, Steven C. Marschman, Robert E. Einziger and Ray B. Stout, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1074-1079.

The Reactivity Effects of Nuclide Buildup and Decay During Long-Term Fuel Storage, T. Suto, S. M. Bowman and C. V. Parks, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p831-837.

Regulatory Issues Associated with the Multi-Purpose Canister (MPC) System, John P. Roberts, Robert G. Morgan, Mary L. Birch and Linda J. Desell, (High Level Radioactive Waste Management, High Level Radioactive Waste

Program Committee, 1994), p1161-1167.
Repository Criticality Safety for the DOE Spent Nuclear Fuel Program, Dennis Evans and Brian Palmer, (High Level Radioactive Waste Management, High Level Ra-

dioactive Waste Program Committee, 1994), p852-859.
Review of Advanced Techniques for Waste Canister Labeling, William G. Culbreth, Bharani Kumar Bhagi and Anand Kanjerla, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee 1904), p.1701-1705. mittee, 1994), p1791-1795.

Review of Technologies and Alternatives for Dispositioning DOE/INEL Spent Nuclear Fuels, C. Lee Benedixsen, Jerry D. Christian, Arlin L. Olson and Tom R. Thomas, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), 232, 326. p343-350.

Role of the Dual Purpose (Storage and Transport) Metal Cask In the Spanish Strategy for Temporary Storage of Spent Fuel, José Gago and José M. Grávalos, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1174-

Safeguarding the Disposal of Canada's Used Nuclear Fuel, neguarding the Disposal of Canada 8 Osed Fuerea Fuer, P. Baumgartner and G. R. Simmons, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1782-1790.

Selecting the Design Basis Fuel for the Multi-Purpose Canister, Douglas A. Williamson, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p430-434. Shielding Analysis for the Conceptual Design of the MPC Transportation Cask, Kelvin J. Montague, James R. Thornton, Jr. and Robert G. Eble, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p918-922

Spent Fuel Characteristics Relevant to High-Level Waste (HLW) Source Term, Hersh K. Manaktala, Prasad K. Nair and Charles G. Interrante, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p560-564.

The Spent Fuel Disposal Program in Taiwan, K. K. Li,

(High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p2297-2304

Staff Technical Position on Consideration of Fault Displacement Hazards in Geologic Repository Design, Keith I. McConnell and Michael P. Lee, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2257-2259. Stakeholder Involvement in the Evaluation of a Multipur-

pose Canister System, Jeffrey R. Williams, Dan Kane and Thomas B. Smith, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p182-187.

STRANDNET: A Top-Level Storage, TRANsportation & Disposal NETwork Systems Analysis Tool for Spent Nuclear Fuel Waste Management, Johnny Brock, Felix Godwin and Ray Mitchell, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

waste Management, High Level Radioactive Waste Program Committee, 1994), p1704-1711.

Structured Tradeoffs Preference Elicitation: Evaluating CRWMS Design and Operations, Hollister Hartman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), e10 676 p. 670 p

p619-626.

System Analysis of Non-fuel Assemble Hardware and Spent Fuel Disassembly Hardware: Its Generation and Recommended Disposal, Douglas A. Williamson and James S. Tulenko, (*High Level Radioactive Waste Man*agement, High Level Radioactive Waste Program Committee, 1994), p1553-1561.

System Impacts of Fuel (Age and Burnup) Selection, Flora Emami, William Bailey and Mark Fleming, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1538-1542.

System Implementation of the Multipurpose Canister, Wil-

System Imperhentation of the Multipurpose Canster, Wilsiam R. Hollaway and Robert Rozier, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), pl 137-1142.
Systems Engineering Applied to the Development of the Yucca Mountain Project Design Requirements Documents, M. Sam Rindskopf and Dennis C. Royer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1634-1640.

Systems Modeling for the DOE Spent Nuclear Fuel Program, Dennis Evans, Corey Beebe, Michael Caldwell, Brett Carlsen, Gina Ban, David Van Haaften and Scott Gladson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee. 1994), p331-337.

Thermal Finite Element Analyses of 26 Waste Package Spent Nuclear Fuel Loading Configurations, A. O. Thompson and M. J. Plinski, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p796-800.

Thermal Response of the Waste Package/MPC and EBS, Robert H. Bahney, III and Thomas W. Doering, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p809-815.

Transfer of Spent Nuclear Fuel Into Multi-Purpose Canister Storage, Roger G. Wagstaff, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p444-451.

Uniform State Registration and Permitting For High-Level Radioactive Waste Transportation, James B. Reed, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p158-162.

Utility Industry Perspectives on Repository Licensing, Christopher J. Henkel, Jay E. Silberg and Mindy A. Buren, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1567-1572.

Verification Testing of Multi-Purpose Rail Cask Impact Limiters, Charles J. Temus, Ian D. McInnes, Ken Miller and Robert A. Johnson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p452-456.

What Do We Mean By a "Cold Repository"? William G. Halsey, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2183-2188.

Nuclear fusion

On the Benefits of an Integrated Nuclear Complex for Nevada, James A. Blink and William G. Halsey, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p18-25.

Nuclear power

Application of Lessons Learned Experience To Human Factor Engineering of the Planned Monitored Retrievable Storage Facility, Dan Kane, Hok Wai Kwan and John Richardson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p351-357.

Categorization of Department of Energy Spent Nuclear Fuel, Denzel L. Fillmore, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p315-319.

A Comparison of Propulsion Systems for Space Exploration, Ryan D. Hoover, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p751-755.

A Discussion of Nuclear Propulsion in Space Travel, Jeff Mitchell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p756-760.

Nuclear Propulsion, Evan Dudley, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p761-764.

Nuclear Propulsion: Safety Measures and Concerns, Lindsay N. Herron, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p747-750.

Propulsion Systems for Future Space Exploration, Michael B. Delclos, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p765-768.

Reuse, Recycle, Radiate, ET Apr./May 94, p11.

The Spent Fuel Disposal Program in Taiwan, K. K. Li, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2297-2304.

Nuclear power plant decommissioning

Hanford B Reactor, Now a Half-Century Old, Is ASCE Landmark, NE May 94, p16.

Nuclear power plants
Canisters and Nonfuel Components at Commercial Nuclear Reactors, Kathy Gibbard and James Disbrow, (High Level Radioactive Waste Management, High Level Ra-dioactive Waste Program Committee, 1994), p1543-1552

Doe's Topical Report on a Methodology to Assess Vibra-tory Ground Motion and Fault Displacement Hazards at Yucca Mountain Site, David F. Fenster and Richard C. Quittmeyer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Con

ment, right Level Radioactive waste Program Commit-tee, 1994), p2260-2265.

Dynamics of Nuclear Power Plant Structures with Founda-tion Interaction, Samir J. Serhan, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994),

p55-60.

Gravelly Soil Properties Evaluation by Large Scale In-Situ Cyclic Shear Tests, Takaaki Konno, Munenori Hatanaka, Kenji Ishihara, Yukimi Ibe and Setsuo Iizuka, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p177-200.

Hanford B Reactor, Now a Half-Century Old, Is ASCE Landmark, NE May 94, p16.

Implementation of Response Function Concept for Spent Fuel Cask Analyses, C.-K. Chris Wang, Jack W. Foster and Dominique Napolitano, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p752-756.

Implementation of Spent Fuel Storage Options - A Utility Project Engineers Perspective, Steven M. Unikewicz, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p370-374.

Interfaces and interactions in the Swiss Waste Disposal Programme, C. McCombie, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p238-248. Investigation and Design Concepts for a Nuclear Waste Repository in the Kola Peninsula of Northwest Russia, Nikolay N. Melnikov and William R. Sharp, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p523-529. New Center Seeks Savings at Nuclear Plants, CE May 94,

p22

p22.
The Nuclear Regulatory Commission's Trojan Nuclear Power Plant Seismic Design Licensing Case as an Analog to Alternative Repository Licensing Strategies, Maurice Axelrad and Michael A. Bauser, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), 1973-1577.
On the Benefits of an Integrated Nuclear Complex for Newada Lames A Rijak and William G. Halsev (High)

vada, James A. Blink and William G. Halsey, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p18-25

Reactor Life: Impacts on Waste Management, Ronald R. MacDonald and Billy M. Cole, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p1562-1566. Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994, 0-87262-913-9,

490pp

Stakeholder Involvement in the Evaluation of a Multipurpose Canister System, Jeffrey R. Williams, Dan Kane and Thomas B. Smith, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p182-187.

Status-NRC's QA Overview of the High-Level Nuclear Waste Geologic Repository, William L. Belke and Kenneth R. Hooks, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Commit-

tee, 1994), p1716-1721.

Stiffness of Low Rise Reinforced Concrete Shear Walls, Working Group on the Stiffness of Concrete Shear Wall Structures, Structural Division, ASCE, (R.C. Murray,

chmn.), 1994, 0-7844-0060-1, 196pp.

System Analysis of Non-fuel Assemble Hardware and Spent Fuel Disassembly Hardware: Its Generation and Recommended Disposal, Douglas A. Williamson and James S. Tulenko, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1553-1561.

System Impacts of Fuel (Age and Burnup) Selection, Flora Emami, William Bailey and Mark Fleming, (High Level Radioactive Waste Management, High Level Radioac-tive Waste Program Committee, 1994), p1538-1542.

Utility Industry Perspectives on Repository Licensing, Christopher J. Henkel, Jay E. Silberg and Mindy A. Buren, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1567-1572.

Nuclear reactions

An International Approach to Radioactive Waste Manage-ment, John W. Bartlett, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p26-29.

Propulsion Systems: Present and Future, John Paul Stra-Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p769-773.

Nuclear reactor materials

Canisters and Nonfuel Components at Commercial Nuclear Reactors, Kathy Gibbard and James Disbrow, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1543-1552.

Reuse, Recycle, Radiate, ET Apr./May 94, p11.

System Analysis of Non-fuel Assemble Hardware and Spent Fuel Disassembly Hardware: Its Generation and Recommended Disposal, Douglas A. Williamson and James S. Tulenko, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1553-1561.

Nuclear reactor sites

Environmental Hardening of a Mobile-Manipulator System for Nuclear Environments, Sammy L. Jones, Timothy Cable, James S. Tulenko, Stoyan Toshkov and Fred R. Sias, Jr., (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p296-

Reuse, Recycle, Radiate, ET Apr./May 94, p11.

Nuclear reactors

Actinide Recycling For Reactor Waste Mass and Radiotoxicity Reduction, A. Renard, T. Maldague, S. Pilate, J. Journet, M. Rome, A. Harislur and J. Vergnes, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1682-

At-Reactor Dry Storage Issues, Flora Emami, William Hol-laway and Mark Fleming, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-gram Committee, 1994), p1152-1160.

Automated Post Irradiation Handling of Spent Nuclear Fuel In PNC's FMF-2 Facility Test Hot Cell, Mark H. Price and Thomas R. Frantz, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p358-362.

Burnup Verification Using the Fork Measurement System, Ronald I. Ewing, (High Level Radioactive Waste Man-agement, High Level Radioactive Waste Program Com-

mittee, 1994), p732-738.

Categorization of Department of Energy Spent Nuclear Fuel, Denzel L. Fillmore, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p315-319.

Design Basis Spent Nuclear Fuel Characteristics, Peter Gottlieb and J. Kevin McCoy, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p845-851.

Dry Storage of Highly Enriched Uranium Fuel, D. L. Lord, A. Carter and L. F. Ermold, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1131-1136.

Effects of Axial Burnup Distributions on the Reactivity of Spent Fuel, Theodore A. Parish, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p744-751.

The Efficiency of Source Terms in Performance Assessments for Salt Repositories, Dieter Buhmann, Jürgen Brenner and Richard Storck, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p501-507.

Expected Reaction to Various Options for Spent-Fuel Storage, John Richardson, Christopher Charles and Ausra M.

Richards, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p98-103.

Exploratory Studies Facility and Potential Repository Source Term, J. D. Smith, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p549-553.

Feasibility of Using MPCs for DOE Research and Production Fuel, Daryl A. Lopez and David G. Abbott, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p457-466.

Final Storage of High Activity Waste in Spain, Aurelio Uli-barri, Fernando Huertas and Jesús Alonso, (High Level Radioacetive Waste Management, High Level Radioac-tive Waste Program Committee, 1994), p538-548.

Fitted Analytical Expressions Giving the Enrichment in U235 of a Fresh Fuel Equal to a Spent PWR Fuel, J. Anno, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p757-764.

High Level Waste Disposal and Reprocessing in the UK, Nicholas L. Griffin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p1690-1695.

High-Burnup/Low Cooling-Time Fuel Carrying Capacity of the GA-4 and GA-9 Spent Fuel Shipping Casks, J. K. Boshoven and J. E. Hopf, High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p913-917.

Investigation and Design Concepts for a Nuclear Waste Repository in the Kola Peninsula of Northwest Russia, Nikolay N. Melnikov and William R. Sharp, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p523-529.

The Long Term Radioactive Storage Alternative, Cyril W. Draffin, Jr., Richard G. Little and Richard Blauvelt, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p13-17.

Making Sense of a Sensitive Issue, Stan Reid, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p217-223.

Management of HFIR Spent Fuel, Victoria M. Green, John M. Begovich, A. L. Lotts and George F. Flanagan, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p338-342.

Overview of the Spanish High Level Radioactive Waste Programme, A. López and A. R. Beceiro, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2284-2290.

PWR Axial Burnup Profile Database, R. J. Cacciapouti, S. Van Volkinburg and L. A. Hassler, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p739-743

Reactor Life: Impacts on Waste Management, Ronald R. MacDonald and Billy M. Cole, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p1562-1566.

Review of Technologies and Alternatives for Dispositioning DOE/INEL Spent Nuclear Fuels, C. Lee Benedixsen, Jerry D. Christian, Arlin L. Olson and Tom R. Thomas, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

Selecting the Design Basis Fuel for the Multi-Purpose Canister, Douglas A. Williamson, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p430-434.

Stakeholder Involvement in System Architecture Decisions, Dwight Shelor and Ruane Langton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1609-1613.

A Summary of the NEPSTP Nuclear Safety Program, Albert C. Marshall and G. Kompanietz, (Engineering, Construction, and Operations in Space IV, Rodney G. loway, ed. and Stanley Lokaj, ed., 1994), p708-716.

System Impacts of Fuel (Age and Burnup) Selection, Flora Emami, William Bailey and Mark Fleming, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1538-1542.

A Systems Approach to the Management of a Contaminat-ed Metal Recycle Project, Layne Pincock and Steven Wahnachaffe, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1069-1073.

Thermal Finite Element Analyses of 26 Waste Package Spent Nuclear Fuel Loading Configurations, A. O. Thompson and M. J. Plinski, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

rasic management, ringit excess Radioactive Waster Ito-gram Committee, 1994), p796-800.

Thermal Response of the Waste Package/MPC and EBS, Robert H. Bahney, III and Thomas W. Doering, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p809-815.

TOPAZ II Qualification and Nuclear Testing Program, G. L. Schmidt, F. Thome, B. Ogloblin and E. Glushkov, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p729-738.

TOPAZ II System Description, Susan S. Voss, (Engineering, Construction, and Operations in Space IV, Rodney . Galloway, ed. and Stanley Lokaj, ed., 1994), p717-

728

URSULA: Design of an Underwater Robot for Nuclear Reactor Vessel Inspection, J. Barry Fallon, Steven B. Shooter, Charles F. Reinholtz and S. William Glass, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p311-319.

Using Planning Scenarios for DOE Radioactive Waste Management: The Case of the Advanced Neutron Source, David Lewis Feldman, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p1696-1703.

Verification Testing of Multi-Purpose Rail Cask Impact Limiters, Charles J. Temus, Ian D. McInnes, Ken Miller and Robert A. Johnson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p452-456.

Waste Package Performance Allocation System Study Report, Richard D. Memory, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p969-976.

Nuclear safety

Analyzing Mass Perceptions of Nuclear Politics: Puzzling Over Trust, Hank C. Jenkins-Smith, Deborah A. Pratt and Gilbert W. Bassett, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p131-135.

Avoiding Dual Regulation of the Civilian Radioactive Waste Management Program, John G. Vlahakis and Ricardo J. Palabrica, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Com-

mittee, 1994), p1593-1596.

Burnup Verification Using the Fork Measurement System, Ronald I. Ewing, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p732-738.

Can Long Term Criteria for Deep Disposal be Implemented, K. Bragg, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1397-1403.

Enhancing Nuclear Waste Disposal Safety by Exploiting Regional Groundwater Flow—An Exploratory Proposi-tion, József Tóth and Grant Sheng, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1797-1804.

Growing Interest, Growing Programs, Growing Pains: Successfully Customizing Public Outreach, Mindy Wadkins, Carleen Hill and Theresa Hirsch, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p232-237. Implementation of Spent Fuel Storage Options - A Utility Project Engineers Perspective, Steven M. Unikewicz, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p370-374.

Long Term Nuclear Criticality Potential in Waste Packages, Daniel A. Thomas and Thomas W. Doering, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p838-844.

Nuclear Regulatory Commission Staff Approaches to Im-proving the Integration of Regulatory Guidance Documents and Prelicensing Reviews, Robert L. Johnson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1604-1608.

Nuclear Word Images as Policy Instruments, Janet S. Conary and Dennis L. Soden, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p121-130.

Overview and Status of NRC's High-Level Waste Repositional Committees. Publicate: Leonard Lideotype and Status of NRC's High-Level Waste Repositional Committees.

tory Program, Mark S. Delligatti, Joseph J. Holonich and B. J. Youngblood, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1597-1603.

Repository Criticality Safety for the DOE Spent Nuclear Fuel Program, Dennis Evans and Brian Palmer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p852-859.

Role of U.S. Nuclear Regulatory Commission's On-Site Representatives in Pre-Licensing Activities for a High-Level Radioactive Waste Repository, Philip S. Justus and John Gilray, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1712-1715.

Sand Filter Backwast Pit Criticality Analysis, Hans Toffer and David G. Erickson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p907-912.

The Spent Fuel Disposal Program in Taiwan, K. K. Li, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2297-2304.

Staff Technical Position on Consideration of Fault Displacement Hazards in Geologic Repository Design, Keith I. McConnell and Michael P. Lee, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2257-2259.

Status-NRC's QA Overview of the High-Level Nuclear Waste Geologic Repository, William L. Belke and Kenneth R. Hooks, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Commit-

tee, 1994), p1716-1721.

Swiss Guideline: Protection Objectives for the Disposal of Radioactive Waste, Auguste Zurkinden, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1429-1434.

Tank Waste Information Network System (TWINS), Gary D. Roberson, Jim Brown and Dana S. Roberson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1731-

Training for Effective Public Outreach: A Model for Trans-portation Risk Communication Training, Judith Holm, Kathie Reed and Dick Tardif, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p83-87.

The Use of Expert Judgment Elicitation to Predict Future Climate for the Yucca Mountain Nevada Vicinity, Aaron DeWispelare, Michael P. Miklas, Jr., A. Berge Gureghian, L. Tandy Herren, Robert T. Clemen and James R. Park, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1614-1621.

Nuclear wastes disposal

Actinide Recycling For Reactor Waste Mass and Radiotoxctifilde Recycling for Reactor Waste Mass and Rathonsicity Reduction, A. Renard, T. Maldague, S. Pilate, J. Journet, M. Rome, A. Harislur and J. Vergnes, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1682-1689.

Active Versus Passive Radon Monitoring at the Yucca Mountain Site, Michael D. Griffin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1953-1958.

Alternative Approaches to Reliability Modeling of a Multi-ple Engineered Barrier System, Malwane M. A. Ananda and Ashok K. Singh, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1030-1036.

Analyses of Releases Due to Drilling at the Potential Yucca Mountain Repository, R. W. Barnard, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1292-1297.

Analysis of Flow Along Anisotropic Fractures in Partially Saturated Media, J. S. Y. Wang and B. L. Cox, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1915-1921.

Application of Lessons Learned Experience To Human Factor Engineering of the Planned Monitored Retrievable Storage Facility, Dan Kane, Hok Wai Kwan and John Richardson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p351-357.

The Application of Thermal Rock Bolts in the Thermal Design of a Nuclear Waste Repository, George Danko, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

432

Assessment of Rock Bolt Systems for Underground Waste Storage, Wesley T. Leedy and Robert J. Watters, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p691-695.

Automated Post Irradiation Handling of Spent Nuclear Fuel In PNC's FMF-2 Facility Test Hot Cell, Mark H. Price and Thomas R. Frantz, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p358-362.

Burnup Verification Using the Fork Measurement System, Ronald I. Ewing. (High Level Radioactive Waste Man-agement, High Level Radioactive Waste Program Com-mittee, 1994), p732-738.

Calculation of k_{eff} For Plutonium in High-Level Waste Packages, Paige R. Zielinski and William G. Culbreth, (*High Level Radioactive Waste Management*, High Level Radioactive Waste Program Committee, 1994), p679-683.

Canisters and Nonfuel Components at Commercial Nuclear Reactors, Kathy Gibbard and James Disbrow, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1543-1552.

The Case for Retrievable High-Level Nuclear Waste Disposal, Eugene H. Roseboom, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1774-1781.

Categorization of Department of Energy Spent Nuclear Fuel, Denzel L. Fillmore, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p315-319.

Certification of a Spent Fuel Cask for Storage and Trans portation, Meg Lusardi, Robert M. Bernero and Charles H. Haughney, (High Level Radioactive Waste Manage-ment, High Level Radioactive Waste Program Committee, 1994), p1168-1173.

A Characterization Study of Fractured Rock, Kenzi Karasaki, Barry Freifeld and Cliff Davison, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2423-2428.

The Cigar Lake Analog Study: An Interational R&D Project, Jan J. Cramer and F. Peter Sargent, (High Level Ra-dioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2237-2242.

A Comparison of Spent-Fuel Shipping Cask Response to 10 CFR 71 Normal Conditions and Realistic Hot Day Extremes, Steven James Manson and Steven Eric Gianoulakis, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p788-795.

Comparison of Uranium Dissolution Rates From Spent Fuel and Uranium Dioxide, S. A. Steward and W. J. Gray, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2602-2608.

Compliance with NRC Subsystem Requirements in the Repository Licensing Process, Homi Minwalla, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1578-1584

Concept for Hazardous Material Management and Container Closure Using Copper Based Alloys, Holt Murray, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1000-1007

Confirmation of MRS/MPC Transfer Facility Sizing Using Simulation Modeling, E. Scott Houston and Jennifer D. Hadley, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1387-1392.

Corrosion of HLW Carbon Steel Containers in the Vapor Phase of Salt Brines, E. Smailos, (High Level Radioactive Waste Management, High Level Radioactive Waste

Program Committee, 1994), p963-968.

Corrosion Scenario Development for Corrosion Lifetime Prediction of Carbon Steel Used for Geological Disposal Package, Takanori Fukuda, Guen Nakayama and Masatsune Akashi, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p977-983.

Czech Program of Underground Repository for ILW and HLW Radioactive Wastes, Michal Vanecek, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2310-2314.

Decision Aids for Enhancing Intergovernmental Interac-The Prenotification Analysis Support System (PASS), Marcus Lester, Edward Liebow and Judith Holm, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p168-175.

Design Basis Spent Nuclear Fuel Characteristics, Peter Gottlieb and J. Kevin McCoy, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p845-851.

Determining Plutonium Concentration in Solution Using a Germanium Crystal and a New L X-Ray/y-Ray Spectro-graphic Method, Raymond C. Gatti, Heino Nitsche, Scott A. Carpenter, Kevin E. Roberts, Becraft Kevin A. and Traudel G. Prussin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2719-2729.

Development and Feasibility of a Waste Package Coupled Reactive Transport Model (AREST-CT), David W. Engel, B. Pete McGrail, James A. Fort and Janet S. Roberts, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p1214-1221.

Development of a Mechanical Alcove Excavator for the Yucca Mountain Exploratory Study Facility, Erika Rönnkvist, James E. Friant and Levent Ozdemir, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p411-416.

DOE's Dreyfus Seeks More Funds for Storing Hazardous Waste as Deadline Nears, NE June 94, p1,4.

Dry Storage and Transportation of Failed Fuel, Robert D. Quinn and Brandon D. Thomas, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p949-954.

Dry Storage of Highly Enriched Uranium Fuel, D. L. Lord, J. A. Carter and L. F. Ermold, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p1131-1136.

Dynamic Simulation of Tractor-Trailer-Cask System Used in Nuclear Waste Transportation, Zekai Ceylan and Cahit Evrensel, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p934-941.

Effect of Fractures on Repository Dryout, Roger R. Eaton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p2442-2449.

The Effect of Fuel Type in Unsaturated Spent Fuel Tests, P. A. Finn, M. Gong, J. K. Bates, J. W. Emery and J. C. Hoh, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1080-1087.

Effects of Axial Burnup Distributions on the Reactivity of Spent Fuel, Theodore A. Parish, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p744-751.

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Effects of Policy and Other Changes on Transuranic Waste Disposal at WIPP, Robert H. Neill and Lokesh Chaturvedi, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p280-284.

The Efficiency of Source Terms in Performance Assessments for Salt Repositories, Dieter Buhmann, Jürgen Brenner and Richard Storck, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p501-507.

Electrical Properties of Topopah Spring Tuff as a Function of Saturation, Jeffery J. Roberts and Wunan Lin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2112-

Engineered Barrier Environment, Yucca Mountain, Dale G. Wilder, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1179-1187.

Enhancing Nuclear Waste Disposal Safety by Exploiting Regional Groundwater Flow-An Exploratory Proposition, József Tóth and Grant Sheng, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1797-1804

Estimating Two-Phase Hydraulic Properties by Inverse Modeling, Stefan Finsterle and Karsten Pruess, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2160-2167.

Evaluation of a 6-Wire Thermocouple Psychrometer for Determination of In-Situ Water Potentials, Carole L. Loskot, Joseph P. Rousseau and Mark A. Kurzmack, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

Evaluation of Thermo-Hydrological Performance in Support of the Thermal Loading Systems Study, Thomas A. Buscheck, John J. Nitao and Steven F. Saterlie, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p592-610.

Evidence for a Welded Tuff in the Rhyolite of Calico Hills, Robert P. Dickerson and W. Clay Hunter, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1861-1868

Excavation Damage and Organic Growth in a 1.2m Diameter Borehole, R. A. Everitt, D. A. Brown, D.M. Boychuk and P. Gann, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2092-2100.

Expected Reaction to Various Options for Spent-Fuel Storage, John Richardson, Christopher Charles and Ausra M. Richards, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p98-103.

Experimental Heat Transfer and Fluid Flow Over Drift-Emplaced Canisters, William G. Culbreth and Satish Pat-tisam, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p772-779.

Exploratory Studies Facility and Potential Repository Source Term, J. D. Smith, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p549-553.

Exploratory Studies Facility Test Implementation and Integration with Construction and Design, Deirdre M. Boak, Ned Z. Elkins, Richard Kovach and Ronald D. Oliver, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1770-1773.

Fabrication and Testing of High Strength, High Capacity, Weight Optimized Trailers, Chad Taylor, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p931-933.

Fabrication Options for Depleted Uranium Components in Shielded Containers, Susan B. Derrington, James E. Thompson and Cameron W. Coates, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), 1942-948. Feasibility of Using MPCs for DOE Research and Produc-

tion Fuel, Daryl A. Lopez and David G. Abbott, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p457-466.

Final Storage of High Activity Waste in Spain, Aurelio Ulibarri, Fernando Huertas and Jesús Alonso, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p538-548.

The First Multipurpose Spent Fuel Container Reviewed by the U.S. Nuclear Regulatory Commission (USNRC), Ivan F. Stuart, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p467-476.

Fitted Analytical Expressions Giving the Enrichment in U235 of a Fresh Fuel Equal to a Spent PWR Fuel, J. Anno, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p757-764.

Focus on High-Level Waste Repository Management and Regulation a Rate Regulator's Perspective, Emmit J. George, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1521-1524.

A Formal Expert Judgment Procedure for Performance Assessments of the Waste Isolation Pilot Plant, Kathleen M. Trauth, Robert V. Guzowski and Stephen C. Hora, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1745-

Further Development of a Source Term Model for a Repos-itory in Unsaturated Tuff, Richard Codell and Richard Weller, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p477-484.

FY93 Thermal Loading Systems Study, Steven F. Saterlie and Brent H. Thomson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p573-585.

Heat Transfer Effects in Vertically Emplaced High Level Nuclear Waste Container, Samir F. Moujaes and Yao M. Lei, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p816-822

High-Burnup/Low Cooling-Time Fuel Carrying Capacity of the GA-4 and GA-9 Spent Fuel Shipping Casks, J. K. Boshoven and J. E. Hopf, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p913-917.

Hydrologic Property Alterations Due to Elevated Temperatures at Yucca Mountain, A. L. Flint, M. H. Nash and M. S. Nash, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2101-2105.

Identifying Significant Uncertainties in Thermally Dependent Processes for Repository Performance Analysis, James D. Gansemer and Alan Lamont, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2197-2206.

Immobilizing the Calcined High Level Waste in Glass and Crystalline Phases, S. V. Raman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1124-1130.

Impact of Nuclear Waste Traffic on Highways, Peter E. Sebaaly, Raj Siddharthan and Jon A. Epps, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1255-1262.

The Impact of the Doe Decision Making Process at the Waste Isolation Pilot Plant with Respect to Petroleum Reserves, Matthew Silva, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1753-1761.

Implementation of Response Function Concept for Spent Fuel Cask Analyses, C.-K. Chris Wang, Jack W. Foster and Dominique Napolitano, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p752-756.

Implementation of Spent Fuel Storage Options - A Utility Project Engineers Perspective, Steven M. Unikewicz, (High Level Radioactive Waste Managemen, High Level Radioactive Waste Program Committee, 1994),

p370-374.

Implications of Theories of Asteroid and Comet Impact for Policy Options for Management of Spent Nuclear Fuel and High-Level Radioactive Wastes, Newell J. Trask, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1324-1328.

In Situ Photothermal Deflection Spectroscopy of Uranium Dioxide Dissolution, James D. Rudnicki, Richard E. Russo and David W. Shoesmith, (High Level Radioactive Waste Management, High Level Radioactive Waste

Program Committee, 1994), p2609-2615.

In Situ Stress Determination Research Study, William G. Austin and Paul M. Thompson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2429-2436.

Increasing the Credibility of Scientific Analyses, Thomas A. Cotton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p296-300.

Integrated Geology and Preliminary Cross Section Along the North Ramp of the Exploratory Studies Facility, Yucca Mountain, D. C. Buesch, R. P. Dickerson, R. M. Drake and R. W. Spengler, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1055-1065.

Integrated Modelling of Near Field and Engineered Barrier System Processes, Alan Lamont and James Gansemer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p1195-1201.

Integrating Scientific Results for a Post-Closure Safety Demonstration, Edward C. Taylor, Lawrence D. Ramspott, Scott Sinnock and William M. Sprecher, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p301-305.

Integration of Regulations and Science for HLW Disposal, Lawrence D. Ramspott, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p292-295.

The Interactive Process: A Formal Means to Improved Relations, Allen Benson, A. C. Robison, Paul E. Seidler and Michelle D. Ulick, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p56-62.

Interfaces and interactions in the Swiss Waste Disposal Programme, C. McCombie, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p238-248.

Interlaboratory Comparison of UO₂ Dissolution Rates, W. J. Gray, J. C. Tait, S. A. Steward and D. W. Shoesmith, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2597-2601.

Investigation and Design Concepts for a Nuclear Waste Repository in the Kola Peninsula of Northwest Russia, Nikolay N. Melnikov and William R. Sharp, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p523-529.

Investigation of Faulted Tunnel Models by Combined Photoelasticity and Finite Element Analysis, Samaan G. Ladkany and Yuping Huang, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1979-1986.

Investigation of Stress in a Circular Tunnel Due to Over-burden and Thermal Loading of Horizontally Placed 21 PWR Multi Purpose Canisters, Nadia Kandalaft-Ladkany and Richard V. Wyman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p860-867.

- Isotopic Tracers of Gold Deposition in Paleozoic Limestones, Southern Nevada, Z. E. Peterman, B. L. Widmann, B. D. Marshall, J. N. Aleinikoff, K. Futa and S. A. Mahan, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p.1316–1323.
- Kwicklis, Edward M. Alan L. Flint and Richard W. Healy, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2341-2351.
- Late Cenozoic Evolution of Fortymile Wash: Major Change in Drainage Pattern in the Yucca Mountain, Nevada Region During Late Miocene Volcanism, Scott C. Lundstrom and Richard G. Warren, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2121-2130.
- Late Glacial to Modern Climate Near Yucca Mountain Nevada, Richard M. Forester, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2750-2754.
- Late Holocene Climate Derived From Vegetation History and Plant Cellulose Stable Isotope Records From the Great Basin of Western North America, Peter E. Wigand, Martha L. Hemphill and Sikha (Manna) Patra, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2574-2583.
- Limitations on Scientific Prediction and How They Could Affect Repository Licensing, Richard A. Van Konynenburg, (High Level Radioactive Waste Management: High Level Radioactive Waste Program Committee, 1994), p285-291.
- Long Term Nuclear Criticality Potential in Waste Packages, Daniel A. Thomas and Thomas W. Doering, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p838-844.
- Long-Term Effects of Neutron Absorber and Fuel Matrix Corrosion on Criticality, William G. Culbreth and Paige R. Zielinski, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p634-641.
- Material Condition of Underwater Fuel and Storage Equipment, A. P. Hoskins, J. G. Scott, C. V. Shelton-Davis and G. E. McDannel, High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1117-1123.
- Microtunneling Techniques to Form an Insitu Barrier Around Existing Structures, Philip J. Coller and David G. Abbott, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), 9386-394.
- Models for Source Term, Flow, Transport and Dose Assessment in NRC's Iterative Performance Assessment, Phase 2, Timothy McCartin, Richard Codell, Robert Neel, William Ford, Rex Wescott, John Bradbury, Budhi Sagar and John Walton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1469-1479.
- Molluscs as Climate Indicators: Preliminary Stable Isotope and Community Analysis, Saxon E. Sharpe, Joseph F. Whelan, Richard M. Forester and Ted McConnaughey, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), n2538-2544.
- Monitored Retrievable Storage: A Test of Cultural Values and A Symbol of Tribal Soverignty, W. A. White-Tail Feather, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), 968-75.
- Multi-Barrier Borehole Canister Designs for a Tuff Repository, David E. James, Robert L. Skaggs and Suneeta Mohansingh, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p650-657.
- Multi-Barrier Waste Package Fabrication and Closure Development, Wayne E. Wallin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p955-962.

- Natural Analogues and Performance Assessment, Paul L. Cloke, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1329-1336.
- NEPA Implementation: The Department of Energy's Program to Manage Spent Nuclear Fuel, Dillard B. Shipler, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1532-1537.
- Nuclear Arms Reduction, Nuclear Proliferation and High-Level Radioactive Waste Management, Daniel B. Bullen and James M. McCormick, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p30-39.
- Nuclear Regulatory Commission Staff Approaches to Improving the Integration of Regulatory Guidance Documents and Prelicensing Reviews, Robert L. Johnson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1604-1608.
- Nuclear Word Images as Policy Instruments, Janet S. Conary and Dennis L. Soden, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p121-130.
- Numerical Studies of Radionuclide Migration in Layered Porous Media, Robert L. Buckley, Sudarshan K. Loyalka and M. M. R. Williams, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1842-1847.
- A Numerical Study of Convection Heat Transfer Within Enclosed Horizontal Rod-Bundles, M. Keyhani and L. Luo, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p780-787.
- Observations of Water Movement in a Block of Fractured Welded Tuff, Falah Thamir, Edward M. Kwicklis, David Hampson and Steve Anderton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2020-2021
- Oil and Gas Exploration Near Yucca Mountain, Southern Nevada, John A. Grow, Charles E. Barker and Anita G. Harris, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1298-1315.
- On the Benefits of an Integrated Nuclear Complex for Nevada, James A. Blink and William G. Halsey, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p18-25.
- Overview and Status of NRC's High-Level Waste Repository Program, Mark S. Delligatti, Joseph J. Holonich and B. J. Youngblood, (*High Level Radioactive Waste Man*agement, High Level Radioactive Waste Program Committee, 1994), p.1597-1603.
- Paleoclimate Validation of a Numerical Climate Model, F. Joseph Schelling, Hugh W. Church, Bernard D. Zak and Starley L. Thompson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p.2746-2749.
- Paper Summary Inventory Assessment of DOE Spent Nuclear Fuels, David G. Abbott, Alan R. Bringhurst and Denzel L. Fillmore, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p320-330.
- A Parameter Network and Model Pyramid for Managing Technical Information Flow, Scott Sinnock and Hollister A. Hartman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p306-314.
- Performance Assessment Model of a Single Waste Package, William J. O'Connell, Tzou-Shin Ueng and Lynn C. Lewis, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1188-1194.
- Performance Assessment of the Copper/Steel Canister, Patrik Sellin, Torsten Eng and Lars Werme, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1020-1029.

Performance Assessment of the INEL Spent Fuel and HLW in Two Hypothetical Repositories, Larry L. Taylor, Robert P. Rechard, Henry H. Loo, Ronald D. Klinger and Leonard F. Ermold, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p1508-1513.

A Performance Goal-Based Seismic Design Philosophy for Waste Repository Facilities, Quazi A. Hossain, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2266-

2271.

Phenomenological Studies of Two-Phase Flow Processes for Nuclear Waste Isolation, Karsten Pruess, Stefan Finfor Nuclear Waste Isolation, Karsten Prüess, stetan Fin-sterle, Peter Persoff and Curt Oldenburg, (High Level Radioactive Waste Management, High Level Radioac-tive Waste Program Committee, 1994), p2639-2647. Plans for Managing High Level Waste at the Savannah River Site, N. A. Sheikh and S. R. Salaymeh, (High Level Radioactive Waste Management, High Level Radioactive Waste Menagement, High Level Radioactive Waste Program Committee, 1904), e1037.

dioactive Waste Program Committee, 1994), p1037-1047

The Politics of Nuclear-Waste Disposal, Paul Tarricone,

CE Mar. 94, p56-58.

Prediction of Cladding Life in Waste Package Environments, J. Kevin McCoy and Thomas W. Doering, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p565-572.

Preliminary Assessment of Potential Sites for a Monitored Retrievable Storage (MRS) Facility, Lois S. Smith, Thomas H. Rogers, Arthur Dailey and Jeffrey R. Williams, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1372-1379.

Preliminary Results of Paleoseismic Investigations of Quaternary Faults on Eastern Yucca Mountain, Nye County, Nevada, C. M. Menges, J. R. Wesling, J. W. Whitney, F. H. Swan, J. A. Coe, A. P. Thomas and J. A. Oswald, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2373-2390.

Preliminary Spent LWR Fuel Oxidation Source Term Model, R. E. Einziger, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p554-559.

Progress in Understanding the Structure and Thermodyrogress in Understanding une Studente and Information namics of Calcium Silicate Hydrates, Annemarie Meike, Maria Onofrei, Carol J. Bruton and Brian E. Viani, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2590-2596

Public Participation in Enviornmental Issues in Taiwan, K. K. Li, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p193-200.

Public-Sector Project Politics Assailed, CE Aug. 94, p21. PWR Axial Burnup Profile Database, R. J. Cacciapouti, S. Van Volkinburg and L. A. Hassler, (High Level Radio-active Waste Management, High Level Radioactive

Waste Program Committee, 1994), p739-743.

Qualification Leak Testing of the GA-4 and GA-9 Closure Seal Design, Richard H. Boonstra, (High Level Radioactive Waste Management, High Level Radioactive Waste

Program Committee, 1994), p923-930.

Program Committee, 1994), p923-930.

Radiation Effects from Uranium Ore Bodies, James O. Duguid, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1337-1343.

Radionuclide Release Rates From Natural Analogues of Spent Nuclear Fuel, D. B. Curtis, J. Fabryka-Martin, P. Diston, P. Agwijer, and I. Cowpre, Which Level Bediene.

Dixon, R. Aguilar and J. Cramer, (High Level Radioactive Waste Management, High Level Radioactive Waste

Program Committee, 1994), p2228-2236. Railroad Accident Probability Model, Phillip Fanchon and H. Barry Spraggins, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Management, High Level Kandoactive Waste Frogram Committee, 1994), p666-670.

Rationale for Determining Spent Fuel Acquisitions for Repository Testing, Steven C. Marschman, Robert E. Einziger and Ray B. Stout, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1074-1079.

The Reactivity Effects of Nuclide Buildup and Decay Dur-ing Long-Term Fuel Storage, T. Suto, S. M. Bowman and C. V. Parks, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p831-837.

Regulatory Issues Associated with the Multi-Purpose Canister (MPC) System, John P. Roberts, Robert G. Morgan, Mary L. Birch and Linda J. Desell, (High Level Radioactive Waste Management, High Level Radioactive Waste

Program Committee, 1994), p1161-1167.

Repository Criticality Safety for the DOE Spent Nuclear Fuel Program, Dennis Evans and Brian Palmer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p852-859.

Repository Program Licensing Approach, Thomas M. Wil-liamson and April VanCamp Gil, (High Level Radioactive Waste Management, High Level Radioactive Waste

Program Committee, 1994), p1585-1592.

Results of Drip Tests of Sludge-Based and Actinide-Doped Glasses, J. K. Bates and E. C. Buck, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p1088-1101.

Review of Advanced Techniques for Waste Canister Labeling, William G. Culbreth, Bharani Kumar Bhagi and Anand Kanjerla, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Com-

mittee, 1994), p1791-1795.

Review of Technologies and Alternatives for Disposition-ing DOE/INEL Spent Nuclear Fuels, C. Lee Benedixsen, Jerry D. Christian, Arlin L. Olson and Tom R. Thomas, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p343-350.

Role of the Dual Purpose (Storage and Transport) Metal Cask In the Spanish Strategy for Temporary Storage of Spent Fuel, José Gago and José M. Grávalos, (High Level Radioactive Waste Management, High Level Ra-dioactive Waste Program Committee, 1994), p1174-

1178

436

Role of U.S. Nuclear Regulatory Commission's On-Site Representatives in Pre-Licensing Activities for a High-Level Radioactive Waste Repository, Philip S. Justus and John Gilray, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1712-1715.

Safeguarding the Disposal of Canada's Used Nuclear Fuel, P. Baumgartner and G. R. Simmons, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1782-1790.

Sand Filter Backwast Pit Criticality Analysis, Hans Toffer and David G. Erickson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p907-912.

Selecting the Design Basis Fuel for the Multi-Purpose Canister, Douglas A. Williamson, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p430-434.

Sensitivity and Probabilistic Analyses of the Impact of Climatic Conditions on the Infiltration Rate in a Variable Saturated Multilayered Geologic Medium, A. Berge Gureghian, Aaron R. DeWispelare and Budhi Sagar, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1622-1633

Shielding Analysis for the Conceptual Design of the MPC Transportation Cask, Kelvin J. Montague, James R. Thornton, Jr. and Robert G. Eble, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p918-922.

Simulation of Heat Transfer Around a Canister Placed Horizontally in a Drift, Samir Moujaes and Akshay Bhargava, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

Site Characterisation and Performance Assessment in the Swiss Nuclear Waste Disposal Programme: Benefits from the Second NAGRA/USDOE Project Agreement, S. Vomvoris, P. Zuidema and P. Blümling, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2616-2623.

Spent Fuel Characteristics Relevant to High-Level Waste (HLW) Source Term, Hersh K. Manaktala, Prasad K. Nair and Charles G. Interrante, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

waste management, ringit excert nationactive waste rio-gram Committee, 1994), p560-564.

The Spent Fuel Disposal Program in Taiwan, K. K. Li, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p2297-2304.

Spoils of War, Richard S. Skryness, Karl Swenson and

Williams Pananos, CE Nov. 94, p51-53.

Stakeholder Involvement in System Architecture Decisions, Dwight Shelor and Ruane Langton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1609-1613.

Stakeholder Involvement in the Evaluation of a Multipur-pose Canister System, Jeffrey R. Williams, Dan Kane and Thomas B. Smith, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p182-187.

Standards and Regulations for Geologic Disposal of High Level Waste: An Issues Framework, S. S. Sareen, S. J. Brocoum and T. A. Cotton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1393-1396.

Statistical Considerations on Large-Scale Geomechanics Test Design For Nuclear Waste Repository Characterization, Kunsoo Kim and Hang Gao, (High Level Radioac-tive Waste Management, High Level Radioactive Waste

Program Committee, 1994), p1922-1929.

Status-NRC's QA Overview of the High-Level Nuclear Waste Geologic Repository, William L. Belke and Kenneth R. Hooks, (*High Level Radioactive Waste Management*, High Level Radioactive Waste Program Committee, 1994), p1716-1721.

STRANDNET: A Top-Level Storage, TRANsportation & Disposal NETwork Systems Analysis Tool for Spent Nuclear Fuel Waste Management, Johnny Brock, Felix Godwin and Ray Mitchell, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1704-1711.

Structural Performance of a Multipurpose Canister Shell for HLNW Under Normal Handling Conditions, Samaan G. Ladkany and Rajkumar Rajagopalan, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p984-992.

Structured Tradeoffs Preference Elicitation: Evaluating CRWMS Design and Operations, Hollister Hartman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p619-626.

Studies of Non-Isothermal Flow in Saturated And Partially Saturated Porous Media, Clifford K. Ho, Kevin S. Maki and Robert J. Glass, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2481-2491.

Subrepository Scale Hydrothermal Analysis in Support of Total System Performance Assessment at Yucca Mountain, Srikanta Mishra, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p1202-1213.

System Impacts of Fuel (Age and Burnup) Selection, Flora Emami, William Bailey and Mark Fleming, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1538-1542.

System Implementation of the Multipurpose Canister, William R. Hollaway and Robert Rozier, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1137-1142.

A Systems Approach to the Management of a Contaminat-ed Metal Recycle Project, Layne Pincock and Steven Wahnachaffe, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1069-1073.

Systems Engineering Applied to the Development of the Yucca Mountain Project Design Requirements Documents, M. Sam Rindskopf and Dennis C. Royer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1634Systems Modeling for the DOE Spent Nuclear Fuel Program, Dennis Evans, Corey Beebe, Michael Caldwell, Brett Carlsen, Gina Ban, David Van Haaften and Scott Gladson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p331-337.

Technical and Institutional Features of High-Level Radioactive Waste Management: Searching for Common Ground, Tom Isaacs, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p263-266.

Testing Conceptual Unsaturated Zone Flow Models for Yucca Mountain, Tim P. Brown, Linda L. Lehman and John L. Nieber, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Commit-

tee, 1994), p1999-2006.

ne Testing of Thermal-Mechanical-Hydrological-Chemical Processes Using a Large Block, W. Lin, D. G. Wilder, J. A. Blink, S. C. Blair, T. A. Buscheck, D. A. Chesmut, W. E. Glassley, K. Lee and J. J. Roberts, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1938-

Testing the Spatial Neutrality of the REMI Net Migration Equation, Charles F. Barr, Nasser Daneshvary, Thomas A. Perrigo and Dan S. Rickman, (High Level Radioactive Waste Management, High Level Radioactive Waste

Program Committee, 1994), p40-47.

Thermal Finite Element Analyses of 26 Waste Package Spent Nuclear Fuel Loading Configurations, A. O. Thompson and M. J. Plinski, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p796-800.

Thermal Performance of a Depleted Uranium Shielded Storage, Transportation, and Disposal Package, S. D. Wix and H. R. Yoshimura, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p877-881.

The Tracking of High Level Waste Shipments-Transcom System, P. E. Johnson, D. S. Joy, R. B. Pope, T. M. Thomas and P. B. Lester, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1242-1248.

Transfer of Spent Nuclear Fuel Into Multi-Purpose Canister Storage, Roger G. Wagstaff, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p444-451.

Treatment of Uncertainty in the NRC Regulatory Process, J. Michael McGarry, III and F. Stanley Echols, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1404-1416.

Tree-Rings and Climate: Implications for Great Basin Pale-oenvironmental Studies, Donald A. Graybill, M. R. Rose and Fred L. Nials, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Com-

mittee, 1994), p2569-2573.

Tunnel Boring Machine for Nuclear Waste Repository Research Project, Hans A. Janzon, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p403-410.

Urban Versus Rural Risk Perception Relating to High-Level Nuclear Waste, Dennis L. Soden, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p136-141.

Use of An Analog Site Near Raymond, California, To Develop Equipment and Methods for Characterizing a Potential High-Level, Nuclear Waste Repository Site at Yucca Mountain, Nevada, Amjad M. J. Umari, Arthur Geldon, Gary Patterson, James Gemmell, John Earle and Jon Darnell, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2413-2422.

The Use of Expert Judgment Elicitation to Predict Future Climate for the Yucca Mountain Nevada Vicinity, Aaron DeWispelare, Michael P. Miklas, Jr., A. Berge Gureghian, L. Tandy Herren, Robert T. Clemen and James R. Park, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p1614-1621.

Using Performance Assessment for Radioactive Waste Dis-Ising Performance Assessment for Radioactive Waste Dis-posal Decision Making—Implementation of the Method-ology into the Third Performance Assessment Iteration of the Greater Confinement Disposal Site, David P. Gal-legos, Stephen H. Conrad and Thomas A. Baer, (High Level Radioactive Waste Management, High Level Ra-dioactive Waste Program Committee, 1994), p1671-

Utility Industry Perspectives on Repository Licensing, Christopher J. Henkel, Jay E. Silberg and Mindy A. Buren, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p1567-1572.

Ventilation Considerations for Repository Subsurface Advanced Conceptual Design, Hang Yang and Kalyan K. Bhattacharyya, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Commit-

tee, 1994), p530-537.

Verification of A 1-Dimensional Model for Predicting Shallow Infiltration at Yucca Mountain, Joseph A. Hevesi, Alan L. Flint and Lorraine E. Flint, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2323-2332.

Verification Testing of Multi-Purpose Rail Cask Impact Limiters, Charles J. Temus, Ian D. McInnes, Ken Miller and Robert A. Johnson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p452-456.

Voluntary vs. Directed Siting - Or Somewhere In-Between? Elizabeth Peelle, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p201-212.

gram Committee, 1994), 201-212.
Waste Package Materials Selection Process, Ajit K. Roy, Robert L. Fish and R. D. McCright, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p993-999.

Wetting Phase Permeability in a Partially Saturated Horizontal Fracture, M. J. Nicholl and R. J. Glass, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2007-

What's Science Got To Do With It?: The Use of Public Opinion in Developing Nuclear Waste Policy, Eric B. Herzik and John L. Dobra, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p112-120. Yucca Mountain: A Potential Trade-Off in Radiological Hazards, P. Spiegler, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1959-1963.

Nuclear weapons

Denitrification Inhibition by High Nitrate Wastes, W. Veydovec, J. Silverstein, N. E. Cook, Jr., L. A. Figueroa, R. Hund and G. D. Lehmkuhl, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p415-422.

A Hybrid Algorithm for Radionuclide Estimation, E. A. Yfantis, G. T. Flatman and F. S. Makri, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2063-2068.

Monitored Retrievable Storage: A Test of Cultural Values and A Symbol of Tribal Sovereignty, W. A. White-Tail Feather, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p68-75.

Nuclear Arms Reduction, Nuclear Proliferation and High-Level Radioactive Waste Management, Daniel B. Bullen and James M. McCormick, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p30-39.

On the Benefits of an Integrated Nuclear Complex for Nevada, James A. Blink and William G. Halsey, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p18-25.

Plans for Managing High Level Waste at the Savannah River Site, N. A. Sheikh and S. R. Salaymeh, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1037-1047

Numerical analysis

Adaptive Numerical Methods for Transport Dominated Processes, Alfo Quarteroni, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p114-126.

Analysis of the Juturnaiba Embankment Dam Built on an

Organic Soft Clay, Roberto Q. Coutinho, Márcio S. S. Almeida and Jose Bernardino Borges, (Vertical and Horizontal Deformations of Foundations and Embank-ments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p348-363.

Analytical Solution for Bending of Coaxial Orthotropic

Cylinders, Claude Jolicoeur and Alain Cardou, EM Dec.

94, p2556-2574.

Axisymmetric Time-Domain Transmitting Boundaries, Andrew John Deeks and Mark Felton Randolph, EM Jan. 94, p25-42.

Composite Beam Element with Layerwise Plane Sections, Youngchan Kim, Julio F. Davalos and Ever J. Barbero,

EM May 94, p1160-1166. Computation of Turbulent Shear Flow Over Surface-Mounted Obstacle, Jianming He and Charles C. S. Song, EM Nov. 92, p2282-2297.

Concurrent E-I Algorithm in Structural Dynamics, E. D. Sotelino, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p169-176.

A Control Volume Finite Element Method for the Solution

of 2-D Overland Flow Problems, P. Di Giammarco and E. Todini, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p82-101. Design and Performance of a Piled Raft Foundation, Mark

Randolph and Patrick Clancy, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p314-324.

Discretization Influence on Regularization by Two Localization Limiters, Antonio Huerta and Gilles Pijaudier-

Cabot, EM June 94, p1198-1218.

Dynamics of Elastic Cable Under Parametric and External Resonances, Y. Cai and S. S. Chen, EM Aug. 94, p1786-1802.

Eccentric Settlements of a Rigid Foundation on a Consolidating Layer, Zhongqi Yue and A. P. S. Selvadurai, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y.

Félio, ed., 1994), p612-627. Feno, ed., 1994), pol2-te./ Fracture-Matrix Interaction in Topopah Spring Tuff: Experiment and Numerical Analysis, Robert J. Glass, Vince C. Tidwell, Alan L. Flint, William Peplinski and Yvette Castro, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1905-1914.

GDE: New Approach to Graphical Modeling, M. Krzac-zek, CP Jan. 94, p103-124.

I.P.L. Space Trusses: Structural Performance and Analysis, M. Burt, D. Shriftailig, V. Babaev, A. Bogdanov and D. Beilin, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1075-1081.

Improved Computer Simulation of 3D Wind Flow Around a Building, Y. S. Zhou and T. Stathopoulos, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

Large Deflection of Beams under Moment Gradient, S. Chucheepsakul, S. Buncharoen and C. M. Wang, EM Sept. 94, p1848-1860.

Measurement and Prediction of Surface Shear Stress in Annular Flume, D. I. Graham, P. W. James, T. E. R. Jones, J. M. Davies and E. A. Delo, HY Sept. 92, p1270-1286. Modeling 3D Ground-Water Flow by Modified Finite-Element Method, Fang Xin Yu and Vijay P. Singh, IR

Sept./Oct. 94, p892-909.

Moment-Curvature Relationships for Dented Tubular Sections, L. Duan, J. T. Loh and W. F. Chen, ST Mar. 93,

Multicomponent-Flow Analyses by Multimode Method of Characteristics, Chintu Lai, HY Mar. 94, p378-395.

Characteristics, Chiniu Lai, 11 Mar. 94, p. 716-393.

New Methods for Modelling Dam-Break Wave, A. Paquier, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p229-240.

Numerical Analysis of High Velocity Flow with Zero-Depth Line and Oblique Shock Wave in Steep Open-Channels, Takashi Hosoda and Nozomu Yoneyama, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1270-1274.

Numerical Simulation of Site Effects, Apostolos S. Papageorgiou, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p567-572.

An Overview of the Analysis and Design Techniques Used on the Main Tunnels of the SSC, Steven H. Baldauf, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1967-1974.

Performance of Embankment Stabilized with Vertical Drains on Soft Clay, B. Indraratna, A. S. Balasubramaniam and P. Ratnayake, GT Feb. 94, p257-273.

Performance of Nanhua Dam During Construction, Hsien-Chang Kao and Jin-ching Chern, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p417-

Plane Orthotropic Layer by Transfer Matrix-Spline Boundary Element, L. Z. Jiang and J. S. Lee, EM May 94, p1026-1041.

Rectangular Thick Plate with Free Edges on Pasternak Foundation, X. P. Shi, S. A. Tan and T. F. Fwa, EM May 94, p971-988.

Reliability-Based Optimum Design for UBC and Nondeterministic Seismic Spectra, C. C. Chang, J. F. Ger and F. Y. Cheng, ST Jan. 94, p139-160.

Simple Numerical Method for Solving Horizontal Circular Curves, Said M. Easa, SU Feb. 94, p44-48.

Simplified Creep Analysis of Composite Beams with Flexible Connectors, Luigino Dezi, Carlo Ianni and Angelo Marcello Tarantino, ST May 93, p1484-1497.

Steady-State Oscillation of Hysteretic Differential Model. II: Performance Analysis, C. W. Wong, Y. Q. Ni and J. M. Ko, EM Nov. 94, p2299-2325.

Structural Shape Analysis under the Prescribed Displacement Mode, Yasuhiko Hangai and Kazuaki Harada, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p694-703.

Two-Dimensional Dam-Break Flow Simulation in a Sudden Enlargement, M. Četina and R. Rajar, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p268-282.

Variation of Ductility Capacity of Steel Beam-Columns, Masayoshi Nakashima, ST July 94, p1941-1960.

Vertical Displacement Induced in Soil by Conical Shell Foundations, Mohamed Abdel-Rahman and Adel Hanna, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p937-948.

Numerical calculations

An Adaptive Nine-Point Finite Volume Roe Scheme for Two-Dimensional Saint-Venant Equations, Fayssal Benkhaldoun and Luc Monthe, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p30-44.

Appropriateness of One-Dimensional Calculations for Repository Analysis, Roger R. Eaton, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p1492-1500.

A comparison between computed and measured bed evolution in a river bend, L. Montefusco and A. Valiani, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994),

Different Methods to Compute Pollutant Dispersion Around Buildings, R. Panneer Selvam and Alan H. Huber, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p92-98.

Direct and Modal Analyses for Shape-Finding of Unstable Structures, Tetsuyuki Tanami and Yasuhiko Hangai, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p714-723.

Dynamic Analysis of Unstable Structural Systems With Prescribed Velocities, Ken-ichi Miyazaki, Yasuhiko Hangai and Ken-ichi Kawaguchi, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p239-248.

Form Finding Numerical Methods for Tensegrity Systems, René Motro, Sihem Belkacem and Nicolas Vassart, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p704-713.

Local Buckling by Complex Finite Strip Method Using Bubble Functions, Mojtaba Azhari and Mark Andrew Bradford, EM Jan. 94, p43-57.

Modeling Viscoelastic Behavior of Hot Mix Asphalt (HMA) Using Discrete Element Methods, Jay Namunu Meegoda and K. George Chang, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p804-811.

Numerical Studies of Radionuclide Migration in Lavered Porous Media, Robert L. Buckley, Sudarshan K. Loyalka and M. M. R. Williams, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p1842-1847.

Slender Rigid Block Motion, S. J. Hogan, EM Jan. 94, Weighted Feedback for Groundwater Remediation, C. A.

Shoemaker, G. J. Whiffen and J. A. Denu, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p189-192.

A 2D numerical simulation of the Po river delta flow, D. Ambrosi, S. Corti, V. Pennati and F. Saleri, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p18-29.

Advances in 3D Modelling of Wave-Driven Currents, Philippe Péchon, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p366-375.

Agroforestry Drainage Management Model: I: Theory and Validation, F. F. Karajeh, K. K. Tanji and I. P. King, IR Mar./Apr. 94, p363-381.

Agroforestry Drainage Management Model: II: Field Water Flow, F. F. Karajeh and K. K. Tanji, IR Mar./Apr. 94, p382-396.

Ambrose, R. B. T. S. Wu and S. C. McCutcheon, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p890-894.

Analysis of Dredged Material Placed in Open Water, B. H. Johnson, N. W. Scheffner, A. M. Teeter, E. B. Hands and H. R. Moritz, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p18-27.

Application of Numerical Models in the Design of Clarifiers, J. A. McCorquodale and S. P. Zhou, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p186-193.

Application of WQMAP to Upper Narragansett Bay, Rhode Island, J. C. Swanson and D. L. Mendelsohn, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p656-678.

Assessing the Impact of Channel Deepening in Delaware Bay Through Numerical Modeling, K. W. Kim, B. H. Johnson and J. Gebert, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p29-41.

Assessment and Recommendations for the Enhancement of the Bardawil Lagoon Outlets, Alfy M. Fanos, Ahmed A. Khafayg, Mohamed N. Anwar and Mary G. Naffaa, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p189-

An Assessment of the Joint Factor as Used in the Modified MEXE Method, N. G. Gong and B. S. Choo, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p704-711.

Bed Load Roughness in Supercritical Flow, Scott E. Stonestreet, Ronald R. Copeland and Darla C. McVan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p747-751.

- Bed Material and Numerical Modeling in a Gravel/Cobble Bed Stream, Robert T. Milhous, Russell A. Dodge and Perry L. Johnson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1055-1059.
- Bed-Level Variation in Channel Expansions with Movable Beds, P. K. Mohapatra and S. Murty Bhallamudi, IR Nov./Dec. 94, p1114-1121.
- Breaking Wave Persistence in Parametric Surf Zone Models, Howard N. Southgate and Helen M. Wallace, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p543-555.
- Circulation and Flushing in Casco Bay, Maine, Bin Gong and Bryan R. Pearce, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1039-1046.
- Comparisons of Directional Wave Analysis Methods, Taerim Kim, Lihwa Lin and Hsiang Wang, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p554-568.
- Computation of Transverse Mixing In Streams, Alexander C. Demetracopoulos, EE May/June 94, p699-706.
- Conditioned Stochastic Processes for Conditional Random Fields, Hiroyuki Kameda and Hitoshi Morikawa, EM Apr. 94, p855-875.
- Considerations in 2-D Modeling of Hydraulically Steep Flow, R. C. Berger and R. L. Stockstill, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1285-1289.
- Cross-Shore Sand Transport Under Random Waves at SU-PERTANK Examined at Mesoscale, Magnus Larson and Nicholas C. Kraus, (*Coastal Dynamics '94*, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p204-219.
- Decay of Random Waves on Non-Monotonic Profiles, Magnus Larson, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p503-517.
- Demonstration of the Wes New York Bight Hydrodynamic Model in Long Island Sound, S. Rao Vemulakonda and Norman W. Scheffner, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p309-322.
- Depth-Averaged Flow Model in Curvilinear Coordinates, Hector R. Bravo, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p517-521.
- Determination of Geometry and Stress Distribution of an Optimal Stable Channel, Gregorio G. Vigilar, Jr. and Panayiotis Diplas, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p959-963.
- DETMOD: A Desktop Estuarine Transport MODel, David G. Kleinschmidt and Bryan R. Pearce, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1032-1038.
- Development of Transport Model for Groundwater Planning and Management in Taipei Basin, Nien-Sheng Hsu, Ming-Jame Horng, Chian Min Wu, William W-G. Yeh and Jan-Tai Kuo, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p332-335.
- Effects of Flocculation on Particle Transport, Wilbert Lick, C. Kirk Ziegler, James Lick and Aruna Joshi, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p172-186.
- Energy Dissipation and Sediment Transport in Large Scale Tests, H. Rahlf and Y. Wu, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p742-754.
- Estimating Two-Phase Hydraulic Properties by Inverse Modeling, Stefan Finsterle and Karsten Pruess, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2160-2167.

- Evaluation of a Third-Generation Wave Model for the U.S. Atlantic Coast, R. E. Jensen, S. H. Houston, C. L. Vincent and M. D. Powell, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p433-447.
- Evaluation of Consolidation Behavior of Mine Tailings, K. J. L. Stone, M. F. Randolph, S. Toh and A. A. Sales, GT Mar. 94, p473-490.
- Expansion and Contraction of Powder River Between Moorhead and Broadus, MT: Geomorphic Observations and Numerical Modeling, James E. Pizzuto, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p984-988.
- Experimental and Numerical Studies of Composite Beams Exposed to Fire, Dietmar Hosser, Thomas Dorn and Osama El-Nesr, ST Oct. 94, p2871-2892.
- Experimental Study of Monochromatic Wave-Ebb Current Interaction, Michael J. Briggs and Philip L. -F. Liu, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p474-488
- Experimental Verification of Numerical Model for Nonlinear Wave Evolutions, Takumi Ohyama, Serdar Beji, Kazuo Nadaoka and Jurjen A. Battjes, WW Nov./Dec. 94, p637-644.
- Field and Prototype Measurements for Numerical Coastal Modelling, Hans-H. Dette, Jürgen Newe and Yongjun Wu, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p129-142.
- Finite Element Algorithms for Modelling Flood Propagation, J. -M. Hervouet and J. -M. Janin, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p102-113.
- Finite Element Limit Load Analysis by the Static Approach Using Nonlinear Programming, Hichem Smaoui, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1936-1943.
- Flood Propagation on Mobile Beds under Mountainous Flow Conditions, C. Beffa and R. Faeh, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p327-341.
- The Formation of a Turbidity Maximum in an Estuary, Kathryn Pickens, Zenitha Chroneer, Poorvi Patel and Wilbert Lick, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p187-201.
- Fortification of MMOC Models for Steep-Channel Flows, Chintu Lai, Der-Liang Young and Jen-Ter Chang, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), pl 290-1294.
- Heat Transfer Modeling in Burial Sites Containing Heat-Generating Waste, Mohamed Alsharif, Iqbal Ahmed and Paul Dickman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p899-906.
- dentification of A Field Data Collection Program in Delaware Bay, B. H. Johnson, K. W. Kim, T. L. Fagerberg and H. A. Benson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p900-904.
- Influence of Sikes Cut on Apalachicola Bay, FL; A Preliminary Analysis from a Three-Dimensional Perspective, William K. Jones, Bóris Galperin, Robert H. Weisberg and T. S. Wu, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p351-365.
- An Information Engineering Approach for Environmental Impact Assessment and Monitoring Program, Chun-Hou Orr and Shu-Fang Peng, (Computing in Civil Engineering, Khalii Khozeimeh, ed., 1994), p249-256.
- Investigation of an Anisotropic k-e Model, Yun Zhang, Yongquan Yang and Chigong Wu, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1280-1284.
- Irregular Wave Overtopping of Revetments in Surf Zones, Nobuhisa Kobayashi and Andrew W. Raichle, WW Jan./Feb. 94, p56-73.

Issues Related to Modeling the Transport of Suspended Sediments in Northern San Francisco Bay, California, Ellen Thomas McDonald and Ralph T. Cheng, (Estua-rine and Coastal Modeling III), Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p551-564.

Kwicklis, Edward M. Alan L. Flint and Richard W. Healy, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p2341-2351.

Large-Scale Computations in Analysis of Structures, D. B. McCallen and G. L. Goudreau, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p183-192.

Localized Sigma Coordinates for the Vertical Structure of Hydrodynamic Models, Angré B. Fortunato and António M. Baptista, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p323-335.

Luo, Ming, Weilin Xu and Huasheng Liao, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1009-1013.

MAC3D: Multiblock Numerical Model for Hydraulic Applications, Robert S. Bernard, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p507-511.

Measurement and Hindcast of Hurricane Iniki Coastal Inundation, Steven Yamamoto, Scott Sullivan and Eiji Nakazaki, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p756-771.

Measurements and Numerical Modelling of High Rise Building Foundations on Frankfurt Clay, Eberhard Franke, Bernd Lutz and Yasser El-Mossallamy, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1325-1336.

Modal Identification of Cable-Stayed Pedestrian Bridge, Mack G. Gardner-Morse and Dryver R. Huston, ST Nov.

93, p3384-3404.

Modeling Bottom Friction in Wind-Wave Models, Hendrik L. Tolman, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p769-783.

Modeling of Rectangular Settling Tanks, Siping Zhou and John A. McCorquodale, HY Oct. 92, p1391-1405.

Modeling Unsteady Open-Channel Flows-Modification to Beam and Warming Scheme, Akhilesh Kumar Jha, Juichiro Akiyama and Masaru Ura, HY Apr. 94, p461-

Modelling of Flood Wave Propagation Over Flat Dry Areas of Complex Topography in Presence of Different Infrastructures, P. Molinaro, A. Di Filippo and F. Ferrari, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994),

Navigation Channel Design Using Real-Time Marine Simulator, Dennis W. Webb, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1081-1090.

Nearshore Breaking Waves: A Numerical Model, Scott L. Douglass and Juan C. Ortiz, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p864-879.

A New Set of Equations for Very Shallow Water and Partially Dry Areas Suitable to 2D Numerical Models, A. Defina, L. D'Alpaos and B. Matticchio, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p72-81.

New Techniques for Experimental Studies for Dredged Material Dispersion, Philip J. W. Roberts, Adrian Ferrier and B. H. Johnson, (Dredging '94, E. Clark McNair, Jr.,

ed., 1994), p1192-1200.

Numerical Comparison of Pipe-Column-Separation Mod-els, Angus R. Simpson and Anton Bergant, HY Mar. 94, p361-377.

Numerical Experiments on Instability in Unsteady Flow Modeling, Chin-lien Yen and Ming-hsi Hsu, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1275-1279. Numerical Model of the Longshore Current on a Barred Beach, Jane McKee Smith, Magnus Larson and Nicholas C. Kraus, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p798-812

Numerical Model Verification on Tidal Current in Tokyo Bay, Yoshitaka Fukui, Toshio Kodama and Mutsuto Kawahara, (Hydraulic Engineering '94, George V Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p880-

Numerical Modeling for Sediment-Pass-Through Operations of Reservoirs, Howard H. Chang, Larry L. Harrison, Wing Lee and Scott Tu, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

94, George V. Cotroneo, ed. and Ralph K. Rumer, ed., 1994), p1014-1019.
Numerical Modeling of Advective and Diffusive Transport in the Rappahannock Estuary, Virginia, Kyeong Park and Albert Y. Kuo, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed. 1004, ed., 461-474. ed., 1994), p461-474

Numerical Modeling of Fluid Mud Transport in Estuaries, Yan Yan and Earl J. Hayter, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p1070-1074.

Numerical Modeling of Initial Ground Movement in an Instrumented Superconducting Super Collider Shaft, David B. Spires, Fei Duan and Marek Mrugala, (Com-puting in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1990-1996.

Numerical Modeling of Salt Transport at a Solid Waste Disposal Site Capped With Coastal Dredged Master Brisposal Site Capped With Coastal Dredged Material, Ram Krishnamohan, John B. Herbich and Fred S. Williams, Chredging '94, E. Clark McNair, Jr., ed., 1994), p1152-1161.

Numerical Modeling of Tensile Crack Propagation in Concrete Dams, Ram Kumar and G. C. Nayak, ST Apr. 94,

p1053-1074.

merical Modeling of Waves in Harbors, Edward F. Thompson, H. S. Chen and Lori L. Hadley, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p590-601.

Numerical Modelling and Laboratory Verification for the Turbulent Flow Field in the Branching Channel, Kefeng Li, Wen-Qian Zhao, Jia Li and Lin Luo, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1295-1299.

Numerical Simulation, of One Dimensional Transcriptical

Numerical Simulation of One Dimensional Transcritical Flow, Ehab A. Meselhe, Fotis Sotiropoulos and Forrest M. Holly, Jr., (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p512-

The Numerical Simulation of Wetting and drying Areas using Riemann Solvers, G. W. Tchamen and R. Kahawita, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994),

Numerical Simulations of Monotonic and Cyclic Loading of Granular Soil, Tang-Tat Ng and Ricardo Dobry, GT

Feb. 94, p388-403. Numerical Simulations of the CCS under the Joint Effects of Coastal Geometry and Surface Forcing, Yuhe Song and Dale Haidvogel, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p216-234.

A Numerical Study of Convection Heat Transfer Within Enclosed Horizontal Rod-Bundles, M. Keyhani and L. Luo, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p780-787.

A Numerical Study of Hydraulic Jump and Mixing in a Stratified Channel With a Sill, Ping Chen, R. Grant Instruction and Constal Model. gam, danying Gan, (estuarne and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p119-133. gram and Jianping Gan, (Estuarine and Coastal Model-

On the Generation of Infragravity Waves by Shoaling Multidirectional Waves, Okey Nwogu, (Ocean Wave Meas-urement and Analysis, Orville T. Magoon, ed. and J. Mi-

chael Hemsley, ed., 1994), p1-14.

One- and Two-Dimensional Analysis of Flow in Hotophia Creek, MS, Yafei Jia and Carlos V. Alonso, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p589-594.

Optimization of the Design and Operation of Soil Vapor Extraction Systems, Marshall W. Davert and William W-G. Yeh, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p181-184.

An Overview of Shotcrete Usage on the SSC, Steven H. Baldauf, (Structures Congress XII, N. C. Baker, ed. and

Barry J. Loodno, ed., 1994), p773-778.

Paleoclimate Validation of a Numerical Climate Model, F. Joseph Schelling, Hugh W. Church, Bernard D. Zak and Starley L. Thompson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2746-2749.

Physical-Based Numerical Model of Inclined Starting Plumes, Juichiro Akiyama, Masaru Ura and Wei Wang,

HY Oct. 94, p1139-1158.

A Physically-Based Model of Channel Widening, Stephen E. Darby and Colin R. Thorne, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p944-948.

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Predicting Wave Spectra With a Third Generation Spectral Wave Model, Charles L. Vincent, Ph.D., Robert E. Jensen, Ph.D. and Hans C. Graber, Ph.D., (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p420-432

A Preliminary Characterization of the Spatial Variability of Precipitation at Yucca Mountain, Nevada, Joseph A. Hevesi, Dale S. Ambos and Alan L. Flint, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2520-2529.

Propagation of Linear Gravity Waves Over Slowly Vary ing Depth and Currents, Francisco J. Rivero and Agustín S.-Arcilla, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994),

Random Vortex Models in Wind Engineering, George Turkiyyah, Dorothy Reed and Jiyao Yang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

Recalibration of Parshall Flumes at Low Discharges, Steven J. Wright, Blake P. Tullis and Tamara M. Long, IR Mar./Apr. 94, p348-362.

Revised Hydraulic Design of the Rio Hondo Flood Control Channel, Scott E. Stonestreet, Michael E. Mulvihill and John E. Hite, Jr., (Hydraulic Engineering '94, George V Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p401-405.

The Role of Long Waves in Sand Bar Formation - a Model Exploration, Tim O'Hare, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C.

Kraus, ed., 1994), p74-88.

SEASHELL - Software for the Simulation of Transport and Fate of Pollutants in Coastal Waters, Venkat S. Kolluru and Malcolm L. Spaulding, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p624-640.

A Second-Generation Wave Model for Coastal Wave Prediction, J. A. Ewing and R. C. Hague, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and

J. Michael Hemsley, ed., 1994), p576-589.

Seismic Behaviour of Tall Guyed Telecommunication Towers, Ghyslaine McClure and Eduardo I. Guevara, (Spatial, Lattice and Tension Structures, John W. Leonard, ed., ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p259-268

Sensitivity of Great Lakes Forecasting System Nowcasts to Meteorological Fields and Model Parameters, William P. O'Connor and David J. Schwab, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p149-157. Shaft Performance in Taylor Marl—Field Measurements vs. Numerical Modeling, David B. Spires, Fei Duan and Marek Mrugala, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p779-784.

Shoaling of Solitary Waves on Plane Beaches, S. T. Grilli, R. Subramanya, I. A. Svendsen and J. Veeramony, WW

Nov./Dec. 94, p609-628.

Short and Long Wave Transformation Modelling in a Large Scale Flume, Luc Hamm and J A. (Dano) Roel-vink, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p503-

Short Circuiting and Density Interface in Primary Clarifiers, Siping Zhou, J. A. McCorquodale and A. M. Godo, HY Sept. 94, p1060-1080.

Simplified Calculation Method for Force Transfer in Composite Columns, Jan A. Wium and Jean-Paul Lebet, ST Mar. 94, p728-746.

Simulation of Flow in Circular Clarifiers with and without Swirl, László Szalai, Peter Krebs and Wolfgang Rodi, HY Jan. 94, p4-21.

Simulation of Wave and Beach Profile Change in SUPER-TANK Seawall Tests, William G. McDougal, Nicholas C. Kraus and Harman Ajiwibowo, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p278-295.

Stability Analysis for Multilayered Rubble

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Stability of Active-Tendon Structural Control with Time Delay, L. Zhang, C. Y. Yang, M. J. Chajes and A. H-D. Cheng, EM May 93, p1017-1024.

Strengths and Weaknesses of Shallow Water Equations in Steep Open Channel Flow, R. C. Berger, *(Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1257-1262.

Studies of Non-Isothermal Flow in Saturated And Partially Saturated Porous Media, Clifford K. Ho, Kevin S. Maki and Robert J. Glass, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2481-2491.

Surface Subsidence Prediction by Nonlinear Finite-Element Analysis, Yacoub Najjar and Musharraf Zaman,

GT Nov. 93, p1790-1804.

Thermal Response in Antenna Under Laser Irradiation, Leslie A. Blackham and Arsalan Razani, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p196-205.

Thermo-Hydrodynamic Modelling of the Chicago Sanitary and Ship Canal, Ejaz Mohammad and Forrest M. Holly, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1306-1310.

Three Dimensional Simulation of Progressive Tunneling Process for Lining Design of Intersecting Tunnels in Soft Rock, Liqiu (Lichu) Guan, Steven H. Baldauf and Wern-Ping (Nick) Chen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2006-2013.

A Three-Dimensional Numerical Simulation of Seasonal Flow and Salt Transport in the C&D Canal, Bernard B. Hsieh, David R. Richards and Jeff Gebert, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p595-599.

Transient Response of Guyed Telecommunication Towers Subjected to Cable Ice-Shedding, Ghyslaine McClure and Na Lin, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p801-809.

Treatment of Nonhomogeneous Terms in Flow Models, Raymond W. Schaffranek and Chintu Lai, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p522-527.

Tributary Loading with a Terrain Following Coordinate System, David P. Podber and Keith W. Bedford, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p475-488.

Undertow at SUPERTANK, Jane McKee Smith, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p220-232.

Use of FESWMS-2DH for the Attaway Road Bridge Repair Project, M. A. Ports, D. D. Dee, Jr. and J. Warren, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p579-583.

Validation of Coastal Morphodynamic Models with Field Data, Helen M. Wallace and Tim J. Chesher, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p114-128.

Velocity Distribution in Compound Channel Flows by Numerical Modeling, Giuseppe Pezzinga, HY Oct. 94, p1176-1198.

Verification of Numerical Modeling of the Fate of Disposed Dredged Material, Michelle M. Thevenot and Billy H. Johnson, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p180-189.

Wave Setup Near a Seawall: Experiments and a Numerical Model, K. A. Rakha and J. W. Kamphuis, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p835-848.

Wave-Induced Longshore Currents in Su Donghoon Yoo, WW Nov./Dec. 94, p557-575.

What is Computational Hydraulics? Angelos N. Findikakis, A. Blumberg, R. Schmalz and K. Bedford, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p482-486.

Assessment of BNR Systems in Florida, Richard O. Mines, Jr. and C. William Woods, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p436-443.

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 General-Purpose Model, Jean M. Boyer, (Water Policy
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- Application of OOP and GUI to the Development of Edu-cational Software in Structural Mechanics, S. T. Mau and V. Aruna, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1273-1279.
- Application of OOP in Developing Finite Element Analysis Programs Using C++, Jianing Ju and M. U. Hosain, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1916-1919.

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- The Context-Oriented Model: An improved Modeling Approach for Representing and Processing Design Stan-dards, Han Kiliccote, James H. Garrett, Jr., Thomas J. Chmielenski and Kent A. Reed, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p145-152.
- Database Integration in Support of Construction Management, A. B. Cleveland, Jr. and J. F. Skolnick, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2054-2057.
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- neering, Knäll Knözeimen, ed., 1994), p1426-1429.

 A Formal Product/Process Model for Engineering, Albert Wong and D. Sriram, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1481-1488.

 Formal Specification of AEC Product Models, Harpreet S. Chadha, John W. Baugh, Jr. and Jeannette M. Wing, (Computing in Civil Engineering, Khalil Khozeimeh, ed. 1904), 5271-579. ed., 1994), p571-578.
- A Frame-Based Drawing Management System Based on Building Object Model, Gakuhito Hirasawa and Yusuke Yamazaki, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p555-562.

 A High Level and Real Time Integration Approach for
- CAD Systems, Mustafa Alshawi, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1779-
- Implementation of an Object-Oriented Knowledge Representation Scheme for the Development of an Intelligent CAD Interface, Nabil Kartam, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1772-1778.
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- Modeling Engineering Design Information: An Object-Centered Approach, M. Maher Hakim and James H. Gar-rett, Jr., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p563-570.
- Modeling of a Knowledge-Based Object-Oriented CAD System for Architectural and Structural Design, Undine Kunze, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1791-1797.
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An Object Oriented Highway Information System in the Client-Server Environment, Kelvin C. P. Wang and John P. Zaniewski, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1959-1966.

An Object-Oriented Approach for Reinforced Concrete Design, Ajay B. Kulkarni and Kamal B. Rojiani, (Computing in Civil Engineering, Khalil Khozeimeh, ed.,

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An Object-Oriented Approach to PC Finite-Element Solutions, Robert J. Lang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1236-1243.

Object-Oriented Finite Volume Dam-Break Model, Bochra Ech-Cherif El Kettani and Driss Ouazar, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p186-196.

Object-Oriented Modeling of Design System for RC Buildings, Ziga Turk, Tatjana Isaković and Matej Fischinger, CP Oct. 94, p436-453.

Object-Oriented Process Modeling to Support Cooperative Planning in Industrialized Building Construction Project, Yusuke Yamazaki, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p998-1005.

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Object-Oriented Structural Analysis with Substructures, Richard Sause and Jun Song, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p153-160.

OODBMS in AEC Software Development: The Highs and Lows of Developing a Commercial Application, Gary D. Hamilton, Lisa Bell, Wade Cohn, Francois Grobler and Kyungrai Kim, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1430-1437.

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The Safety Advisor: An Interactive Object-Oriented Program for Assessing the Safeness of Roadway and Roadside Designs, Malcolm H. Ray, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p341-348.

Simplified Simulation Model Development for Construction Projects, Amr A. Oloufa, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p362-367.

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OSHA Panel Studies Broader Engineer Liability, CE Nov. 94, p108.

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Applications of Large Domain Hydrodynamic Models to Generate Frequency-of-Occurrence Relationships, Norman W. Scheffner, Leon E. Borgman and David J. Mark, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p264-

Ocean bottom

Modeling Bottom Friction in Wind-Wave Models, Hendrik L. Tolman, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p769-783. Numerical Simulations of the CCS under the Joint Effects

of Coastal Geometry and Surface Forcing, Yuhe Song and Dale Haidvogel, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p216-234.

Ocean disposal

Application of Studies on the Overboard Placement of
Dredged Sediments to the Management of Disposal Sites, William Panageotou and Jeffrey Halka, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p349-358.

Assessing the Fate of Dredged Sediments Placed in Open-Water Sites, Northern Chesapeake Bay, Jeffrey Halka, William Panageotou, Lawrence Sanford and Shenn Yu-Chou, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1162-1171.

Beneficial uses of dredged material principles and practice, T. Neville Burt and Michael P. Dearnaley, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p631-643.

Biological and Physical Characterization of a Deep-Ocean Disposal Site off Northern California, James A. Blake, Catherine A. Courtney, Barbara Hecker, Brigitte Hilbig, Jo Ann Muramoto and Donald C. Rhoads, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p111-120.

Development of a Long-Term Dredged Material Management Plan Chincoteague, Virginia, Tom B. Langley, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p359-

Dioxin Capping Management and Monitoring Program:
Design and Implementation, Brian May, Douglas Pabst
and Scott McDowell, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1027-1036.

The Dioxin Capping Project at the NY Mud Dump Site, Scott McDowell, Brian May and Douglas Pabst, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1270-1277.

Disposal of Contaminated Sediments in NY/NJ Harbor, Joel A. Pecchioli, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p606-615.

Dredged Material Accumulation at a Dispersive Disposal Site, Mary Baker Wiley, Drew Carey, Thomas J. Fredette and W. F. Bohlen, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1172-1181.

Dredged Material Dispersion and Accumulation at a Deep Ocean Disposal Site: Comparison of Monitoring Study Results and Model Predictions, Catherine A. Courtney, Albert Mills Soldate, Jr., Jeff Cox and James A. Blake, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p96-

Empirical Guidance for Siting Berms to Promote Stability or Nourishment Benefits, Edward B. Hands and Donald T. Resio, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p220-228.

Environmental Mediation and Open-Water Disposal, Joseph D. Germano, (*Dredging '94*, E. Clark McNair, Jr.,

ed., 1994), p160-169.

Databases for Dredged Material Fate Predictions, Norman W. Scheffner, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p190-199.

Geotechnical Analysis of Capped Dredged Material Mounds, Armand J. Silva, Horst G. Brandes, Carl J. Uchytil, Thomas J. Fredette and Drew Carey, (*Dredging* '94, E. Clark McNair, Jr., ed., 1994), p410-419.

Habitat Value of Offshore Dredged Material Berms for Fishery Resources, Douglas Clarke and Richard Kasul, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p938-945.

- Integrated Acoustic Seafloor Characterization, Peggy Murray, Ed DeAngelo, Jeff Parker and Thomas J. Fredette, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p295-303.
- Management of San Diego Bay Dredged Material Dispos-al, Dan Muslin, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p332-341
- Modeling Initial Mixing of Ocean Wastewater Discharges to Develop Toxic Effluent Limitations, Christopher C. Obropta and Scott T. Taylor, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1047-1054.
- Ocean Disposal with Capping of Dioxin Contaminated Sediment: New York Case History #1, Monte Greges, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1278-
- Performance of Nearshore Berm Disposal at Port Canaveral, Florida, Kevin R. Bodge, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1182-1191.
- Phased and Layered Sampling for Navy Dredging, Sherry L. Ashbaugh, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1436-1440.
- Port of Tacoma Milwaukee Waterway Nearshore Fill Design, John R. Verduin, Doug Saathoff and Garry E. Horvitz, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1388-1399.
- Preliminary Screening Studies for Dredge Disposal Options, Howard L. Cumberland, Barry J. Snyder and William C. Lester, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p342-348.
- Sediment Dispersion and Footprint Modeling Initial Char-acterization at a Deep Disposal Site, Albert Mills Soldate, Jr. and Kim A. Brown, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p103-110.
- TBP Revisited: A Ten Year Perspective on a Screening Test for Dredged Sediment Bioaccumulation Potential, Victor A. McFarland and Paul W. Ferguson, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p718-727.
- Technical Area 5 Dredging Research Program, Thomas W. Richardson, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1-10.
- Verification of Numerical Modeling of the Fate of Dis-posed Dredged Material, Michelle M. Thevenot and Billy H. Johnson, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p180-189.

Ocean engineering

- Conservation Properties of the Mild Slope and Boussinesq Equations, Rodney J. Sobey, (Ocean Wave Measure-ment and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p135-149
- Glossary of Marine Fiber Rope Terms, Task Committee on Marine Fiber Rope of the Waterways, Port Coastal and Ocean Division of ASCE, (Bill Remley, chmn.), 1993, 0-87262-896-5, 80pp.

Ocean waves

- A Comparison of Three Wave-Measuring Buoys, Anand Gnanadesikan and Eugene A. Terray, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p287-301
- Evaluation of a Third-Generation Wave Model for the U.S. Atlantic Coast, R. E. Jensen, S. H. Houston, C. L. Vincent and M. D. Powell, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p433-447.
- Extensive Comparison of Directional Wave Analysis Methods From Gauge Array Data, Michel Benoit, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p740-754
- Implementation and Validation of a Global Third-Generation Wave Model at Fleet Numerical Oceanography Center, Paul A. Wittmann and R. Michael Clancy, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p406-419
- Implementing a National Wave Monitoring Network— Some Lessons and Plans, David D. McGehee and J. Michael Hemsley, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p208-222.

- Instrumented Buoy Network Response to Ocean Swell, Theodore Mettlach and David Gilhousen, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p28-44.
- Kinematics of Wave Overtopping on Marine Structure, J. J. Lee, F. Zhuang and C. Chang, (Ocean Wave Measure-ment and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p821-834.
- New Program for the Marine Observation and Prediction Center of the Central Weather Bureau, Beng-chun Lee, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p124-134.
- Nonlinearity in Wave Crest Statistics, David L. Kriebel and Thomas H. Dawson, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p61-75.
- Observations of Wind Wave Growth by ERS-1 SAR, Chich Y. Peng and Antony K. Liu, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p934-942
- Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994, 0-87262-922-8, 1055pp.
- Wave Monitoring in The Southern California Bight, W. C. O'Reilly, R. J. Seymour, R. T. Guza and D. Castel, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p448-457

Oceanography

- Coastal and Oceanographic Impact of Hurricane Andrew, Hsiang Wang and Lihwa Lin, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p791-798.
- Coastal Engineering Data Retrieval System (CEDRS), Danielle S. McAneny and Doyle L. Jones, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p330-338.
- Estimation of Design Surge Heights by Utilizing Meteoro-logic and Oceanographic Data, Jahir Uddin Chowdhury and A. K. M. Tareque, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p918-922.
- Implementation and Validation of a Global Third-Generation Wave Model at Fleet Numerical Oceanography Center, Paul A. Wittmann and R. Michael Clancy, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p406-

Oceans

- Measurement of Turbulent Properties in a Natural System, Jörg Imberger and Roger Head, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p1-20.
- Reducing Discharges from San Francisco to the Bay, James J. Jordan and Sangeeta Goyal, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p842-845.
- Satellite Observations of Wave Heights in Arabian Sea and Bay of Bengal, Usha Natesan and S. P. Subramanian, WW Nov./Dec. 94, p576-579.
- Short-Term Forecasts for Lake Erie, John G. W. Kelley, Chieh-Cheng J. Yen, Jay S. Hobgood, David J. Schwab and Keith W. Bedford, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p227-231.
- "Deepwater Waves and Tsunami Produced by the Impacts of Small Asteroids", J. G. Hills, (Engineering, Construc-tion, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1365-1371.

Odor control

Control of Odor and VOC Emissions at Wastewater Treatment Plants -Boston Harbor Case Study-, Robert Getter, Cheryl Breen and Mark Laquidara, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p548-555.

Oedometers

Modified Oedometer for Arid, Saline Soils, Omar Saeed Baghabra Al-Amoudi and Sahel N. Abduljauwad, GT

Offshore engineering

Gas in Soil I: Detection and η-Profiling, Nader S. Rad and Tom Lunne, GT Apr. 94, p697-715.

Gas in Soils II: Effect of Gas on Undrained Static and Cy-clic Strength of Sand, Nader S. Rad, Antonio J. D. Vianna and Toralv Berre, GT Apr. 94, p716-736.

Prospects of Vacuum-Assisted Consolidation for Ground Improvement of Coastal and Offshore Fills, S. Thevanayagam, E. Kavazanjian, Jr., A. Jacob and I. Juran, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p90-105.

Offshore pipeline

Forces on Vibrating Cylinder Near Wall in Current and Waves, B. M. Sumer, J. Fredsøe, B. L. Jensen and N. Christiansen, WW May/June 94, p233-250.

Offshore platforms

Assessing Fitness for Purpose of Offshore Platforms. I: Analytical Methods and Inspections, H. Banon, R. G. Bea, F. J. Bruen, C. A. Cornell, W. F. Krieger and D. A. Stewart, ST Dec. 94, p3595-3612.

Assessing Fitness for Purpose of Offshore Platforms. II: Risk Management, Maintenance, and Repair, H. Banon,

ST Dec. 94, p3613-3633.

Impact of Non-Gaussian pdf on Reliability Estimates for Deep Water Platforms, John M. Niedzwecki, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1463-1465.

The Inelastic Response of an Offshore Platform in Hurri-cane Andrew, Gary R. Imm, Patrick E. O'Connor and James M. Light, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p7-12.

Nonlinear Collapse of Offshore Jacket Structures, Helen M. Bolt, Colin J. Billington and J. Keith Ward, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p19-24.

Performance of Offshore Platforms in Hurricane Andrew, Ahsan Kareem and Charles E. Smith, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p577-586.

Probability of Severe Hurricanes Across the Gulf of Mexico, L. E. Chouinard and Chang Liu, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p696-705.

Seismic Hazard Analysis of Nonlinear Structures. I: Methodology, Paolo Bazzurro and C. Allin Cornell, ST Nov.

94, p3320-3344.

Seismic Hazard Analysis of Nonlinear Structures. II: Applications, Paolo Bazzurro and C. Allin Cornell, ST Nov. 94, p3345-3365.

Substantiated Risk Assessment of Jacket Structure, P. S. Tromans and J. W. van de Graaf, WW Nov./Dec. 94, p535-556

Worldwide Calibration of API RP2A-LRFD, R. C. Turner, C. P. Ellinas and G. A. N. Thomas, WW Sept./Oct. 94, p423-433.

Offshore structures

Analysis of Unstiffened and Stiffened Tubular Members Under External Pressure and Structural Loads, Spyros A. Karamanos and John L. Tassoulas, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1520-1525.

Corrosion Fatigue of Stiffened Offshore Steel Tubular Joints, D. S. Ramachandra Murthy, A. G. Madhava Rao and A. R. Santhakumar, ST July 94, p1991-2010.

Dynamic Modal Responses of Wave-Excited Offshore Structures, G. D. Hahn and J. R. Sanghvi, EM Apr. 94,

Effects of Sea Surface Movement on Offshore Structures,

G. D. Hahn, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1478-1483.
Grout Repair of Dented Offshore Tubular Bracing—
Experimental Behavior, James M. Ricles, Troy E. Gillum and William Lamport, ST July 94, p2086-2107.

Hot Spot Stresses of Tubular Joints Subjected to Combined Loadings, Ai-Kah Soh and Chee-Kiong Soh, ST Feb. 93, p654-661.

The Inelastic Response of an Offshore Platform in Hurri-cane Andrew, Gary R. Imm, Patrick E. O'Connor and James M. Light, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p7-12. King Harbor Mole Repair Redondo Beach, California,

Clark B. Adams, (Marinas, Parks and Recreation Devel-opments, Marshall Flug, ed. and Fred A. Klancnik, ed.,

1994), p283-291.

Nonlinear Collapse of Offshore Jacket Structures, Helen M. Bolt, Colin J. Billington and J. Keith Ward, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p19-24.

Predicting Strength Variability of Concrete Offshore Structures, Perry Adebar, Ricardo Foschi and Felix Yao, ST

July 94, p2108-2122.

Volterra Models of Ocean Structures: Extreme and Fatigue Reliability, S. R. Winterstein, T. C. Ude and T. Marthin-sen, EM June 94, p1369-1385.

Ohio

Contractor Not Immune From Sub's Excavating, CE Apr. 94, p27.

A Deep Soil Mix Cutoff Wall at Lockington Dam, Ohio, Andrew D. Walker, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p133-145. Economic Liability Exceeds Contractual Boundaries, CE

Apr. 94, p27.

Apr. 34, p27.

Owners Buy Use Along With Property, CE Apr. 94, p27.

Pavement Treatment in Ohio Transportation System,
Sakchai Prechaverakul, Fabian C. Hadipriono, Roger L. Green, Richard D. Boyle and John A. Ray, (Comp in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1892-1899

Start-ups, CE Oct. 94, p8. Oil pipelines

Transport Process of Surface Liquid Spills, Hsien-Ter Chou, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p145-149.

Oil and Gas Exploration Near Yucca Mountain, Southern Nevada, John A. Grow, Charles E. Barker and Anita G. Harris, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1298-1315.

Radio Remediation, ET Apr./May 94, p11.

Sensitized Photooxidation of Dissolved Sulfides in Water, T. F. Brewer, J. G. Curtis, E. A. Marchand, V. D. Adams and E. J. Middlebrooks, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare

Edwards, ed., 1994), p233-240.

Treatment of Oil in Water Emulsions by Ceramic-Supported Polymeric Membranes, Robert P. Castro, Yoram Cohen and Harold G. Monbouquette, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p82-89.

Soil Stabilization Using Oil-Shale Solid Waste, John P. Turner, GT Apr. 94, p646-660.

Oil spills

An Integrated Shell (ROSS3) for Transport Modeling, Visualization, and Data Management, Keerthisiri S. Angammana, Poojitha D. Yapa and Hung Tao Shen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p150-154.

Monitoring Petroleum Contamination in an Aquifer, Paramesh Anantharaman and Joseph C. Cataldo, (Hydraulic Engineering) '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p272-276.

Nutrient Retention Time in High-Permeability, Oil-Fouled Beach, William R. Wise, Oktay Güven, Fred J. Molz and Steve C. McCutcheon, EE Nov./Dec. 94, p1361-1379.

Transport Process of Surface Liquid Spills, Hsien-Ter Chou, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p145-149.

From King of the Road to 'Six Feet Under', CE Sept. 94, p22.

Global-Climate Change?, ET Aug./Sept. 94, p11.

Hexagonal Prison, The Shape of Things to Come, CE June 94, p12.

Real-Time Surveying System Heading for the Real World, ET Aug./Sept. 94, p1,4.

Subcontractor Must Indemnify, CE Dec. 94, p24-25.

One dimensional flow

Bed-Level Variation in Channel Expansions with Movable Beds, P. K. Mohapatra and S. Murty Bhallamudi, IR Nov./Dec. 94, p1114-1121.

Non-steady-Flow Type Curves for Strip Aquifers with Constant Drawdown, Halil Onder, IR July/Aug. 94,

p732-741.

Tailwater Fishery Management Using a Fish Bioenergetics Model, Ming Shiao, Gary Hauser, Gary Chapman, Bruce Yeager, Tom McDonough and Jim Ruane, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p45-48.

Theory and Observation of Currents and Setup Over a Shallow Reef, Graham Symonds, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p1-13.

Open channel flow

Bed Material and Numerical Modeling in a Gravel/Cobble Bed Stream, Robert T. Milhous, Russell A. Dodge and Perry L. Johnson, (Hydraulic Engineering '94, George Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1055-1059

Bed-Form Development, Stephen E. Coleman and Bruce W. Melville, HY May 94, p544-560.
Boundary Shear in the Vicinity of River Banks, Donald W.

Knight and Shuyou Cao, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p954-958.

Calibration of Movable Bed Model for Armant Area, F. S. El-Gamal and A. F. Ahmed, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p119-128.

Carpet Flow Analysis, Yonas Kinfu and Michael C. Quick, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1161-1165.

Characteristics of Supercritical Flow below Sluice Gate, Iwao Ohtsu and Youichi Yasuda, HY Mar. 94, p332-

Coherent Structures in Compound Open-Channel Flows by Making Use of Particle-Tracking Visualization Tech-Iehisa Nezu, Hiroji Nakagawa and Ken-ichi Saeki, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p406-415.

Effect of Bridge Pier Shape and Contraction Ratios on Backwater Profile, Sabah Al-Nassri, (Hydraulic Engi-

Backwater Frome, Sadah Ar-Nassh, (ryuratute Engi-neering '94, George V. Cotroneo, ed. and Ralph R. Ru-mer, ed., 1994), p563-568. Experimental Study on Turbulent Structures in Unsteady Open-channel Flows, Ichisa Nezu, Akihiro Kadota and Hiroji Nakagawa, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p185-194.

Experimental Study on Unsteady Flow in Open Channels with Flood Plains, A. Tominaga, M. Nagao and I. Nezu, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p396-405

Incipient Hydraulic Jump at Channel Junctions, George C.

Christodoulou, HY Mar. 93, p409-421.

An Investigation of Turbulence in Open Channel Flow via Three-component Laser Doppler Anemometry, Mahalingam Balakrishnan and Clinton L. Dancey, (Fundamentals and Advancements in Hydraulic Measure-ments and Experimentation, Clifford A. Pugh, ed., 1994), p159-175.

Modeling of Maximum Velocity in Open-Channel Flow, Chao-Lin Chiu and Chairil A. Said, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p381-385.

Modeling Unsteady Open-Channel Flows—Modification to Beam and Warming Scheme, Akhilesh Kumar Jha, Juichiro Akiyama and Masaru Ura, HY Apr. 94, p461-

Multicomponent-Flow Analyses by Multimode Method of Characteristics, Chintu Lai, HY Mar. 94, p378-395.

No-Choke Flow in Trapezoidal Channels, Subhasish Dey, EM Oct. 94, p2224-2231.

Numerical Experiments on Instability in Unsteady Flow Modeling, Chin-lien Yen and Ming-hsi Hsu, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1275-1279.

Numerical Simulation of One Dimensional Transcritical Flow, Ehab A. Meselhe, Fotis Sotiropoulos and Forrest M. Holly, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p512-

One- and Two-Dimensional Analysis of Flow in Hotophia Creek, MS, Yafei Jia and Carlos V. Alonso, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p589-594.

Response of Velocity and Turbulence to Abrupt Changes from Smooth to Rough Beds in Open-channel Flows, Iehisa Nezu and Akihiro Tominaga, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p195-204.

Results of Parshall Flume Test, Fred W. Blaisdell, IR

Mar./Apr. 94, p278-291.

Roughness Coefficients for High-Gradient Channels in New York State, William F. Coon, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p722-726.

Self-Aerated Flows on Chutes and Spillways, H. Chanson,

HY Feb. 93, p220-243.

Shock-Wave Reduction by Bottom Drop, Markus Schwalt and Willi H. Hager, HY Oct. 94, p1222-1227.

Significance of Averaging Coefficients in Open-Channel Flow Equations, Renjie Xia and Ben Chie Yen, HY Feb.

94, p169-190.

Simultaneous Flow Visualization and Hot-Film Measurements, Fabián López, Yarko Niño and Marcelo García, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p490-499.

Treatment of Nonhomogeneous Terms in Flow Models, Raymond W. Schaffranek and Chintu Lai, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p522-527.

Turbulence Measurements in Open-Channel Flows over Artificial Bed Forms, D. A. Lyn, HY Mar. 93, p306-326.

Velocity Measurements by the "One-Orange Method", B. A. Christensen, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p76-85.

Open channels

Bed-Level Variation in Channel Expansions with Movable Beds, P. K. Mohapatra and S. Murty Bhallamudi, IR Nov./Dec. 94, p1114-1121.

Computation Method for Regulating Unsteady Flow in Open Channels, Fubo Liu, Jan Feyen and Jean Berlamont, IR Sept./Oct. 92, p674-689.

A Computerized Open Channel Flow Measurement Device, Stan E. Malinky, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p27-36.

Design of Open-Channel-Contraction Transitions, Prabhata K. Swamee and Bharat C. Basak, IR May/June 94,

Dimensionally Homogeneous Manning's Formula, Ben Chie Yen, HY Sept. 92, p1326-1332.

Estimation of Mean Flow Velocity in Ice-Covered Channels, Martin J. Teal, Robert Ettema and John F. Walker,

HY Dec. 94, p1385-1400.

Factors Affecting Accuracy of Slope-Area Discharge De-termination of the September 1992 Flood in Raven Fork, Western North Carolina, W. Harold Eddins and Thomas J. Zembrzuski, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p645-649.

Flow Capacity through Wide and Submerged Vegetal Channels, M. W. Abdelsalam, A. F. Khattab, A. A. Khalifa and M. F. Bakry, IR Sept./Oct. 92, p724-732.

Hydrodynamic Behavior of Compound Rectangular Open Channels, Dan Naot, Iehisa Nezu and Hiroji Nakagawa,

HY Mar. 93, p390-408.

Measurements of the Hydrodynamic Lift and Drag Forces Acting on Riprap Side Slope, A. F. Ahmed and F. S. El-Gamal, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p331-340.

Numerical Analysis of High Velocity Flow with Zero-Depth Line and Oblique Shock Wave in Steep Open-Channels, Takashi Hosoda and Nozomu Yoneyama, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1270-1274.

Probabilistic Design of Open Drainage Channels, Said M. Easa, IR Nov./Dec. 92, p868-881.

Reliability Analysis of Open Drainage Channels under Multiple Failure Modes, Said M. Easa, IR Nov./Dec. 94, p1007-1024.

Supercritical Flows Versus Subcritical Flows in Natural Channels, Douglas J. Trieste, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p732-736.

Width and Depth-Constrained Best Trapezoidal Section, David C. Froehlich, IR July/Aug. 94, p828-835.

Openings

Continuum Model for Analysis of Multiply Connected Per-forated Cores, Domenico Capuani, Marco Savoia and Ferdinando Laudiero, EM Aug. 94, p1641-1660.

Operating costs

Financing Construction and Operation Costs for Parks and Recreation Facilities, Richard Milbrodt, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p360-369.

Operating criteria

Changing Dam Operating Criteria to Accommodate Aquatic Biological Diversity, Daniel F. Luecke, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p218-221.

A Decision Support System for Reassessing the Operation of the Chungju Reservoir System, Darrell G. Fontane, Soon Bo Shim and H. S. Lee, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p299-302.

Development of Fisheries Models for the Missouri River System, Mark Harberg, Doug Latka, Tom Cole, John Nestler and Gene Ploskey, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p742-745.

Missouri River Recreation Economic Analysis, Ronald C. Roberts and R. Scott Jackson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p681-685.

Optimization and Reservoir Operations for the Missouri River, Inês C. L. Ferreira and Jay R. Lund, (Water Poli-cy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p93-96.

Water-Supply Operations during Drought: Continuous Hedging Rule, Jhih-Shyang Shih and Charles ReVelle, WR Sept./Oct. 94, p613-629.

Operation

ARIANE-5 Launch Operations Construction and Operation of a New Launch Complex for Lower Cost, Higher Reliability Missions, Juan de Dalmau, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1521-1537.

Computation Method for Regulating Unsteady Flow in Open Channels, Fubo Liu, Jan Feyen and Jean Berlamont, IR Sept./Oct. 92, p674-689.

Engineering, Construction, and Operations in Space IV, 2 vols, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994, 0-87262-937-6, 1560pp.

Intelligent Tutoring Systems to Aid Water Treatment Plant Operators, Anthony G. Collins, (Computing in Civil En-gineering, Khalil Khozeimeh, ed., 1994), p107-114.

Lessons Learned from the Design, Construction and Operation of Hydroelectric Facilities, Task Committee on Lessons Learned from the Design, Construction and Operation of Hydroelectric Facilities of the Hydropower Committee, Energy Division, ASCE, (Edward F. Carter, chmn.), 1994, 0-7844-0000-8, 105pp.

Logistics Carriers for the First Lunar Outpost, Thomas M. Polette, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1046-1058.

Microworlds for Learning Through Inquiry, David McArthur, Matthew W. Lewis and Miriam Bishay, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1067-1074.

Optimal Control of Water-Supply Pumping Systems, Lin-dell E. Ormsbee and Kevin E. Lansey, WR Mar./Apr. 94, p237-252.

Optimum Operation of Recharge Basins, Hasan Mushtaq, Larry W. Mays and Kevin E. Lansey, WR Nov./Dec. 94, p927-943.

Standard Guidelines for the Design of Urban Subsurface Drainage (ANSI/ASCE 12-92) Standard Guidelines for Installation of Urban Subsurface Drainage (ASCE 13-93) Standard Guidelines for Operation and Maintenance of Urban Subsurface Drainage (ASCE 14-93) (St No. 92-012, 93-013, 93-014), American Society of Civil Engineers, 1994, 0-87262-996-1, 60pp.

Transition from the Functional Requirements to the Technical Requirements Baseline, T. A. Mozhi, S. Douara, M. Senderling and T. Truong, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p1641-1647.

Optical properties

Fiber Optic Chemical Sensors on Mars, M. A. Butler, A. J. Ricco, F. J. Grunthaner and A. L. Lane, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1345-1354

Optical Scatter From a Space Craft Mirror Due to Microscopic Impacts, Lawrence B. Crowell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p368-377.

Optical Waveguide Solar Energy System for Lunar Material Processing, Takashi Nakamura, Constance L. Senior, James M. Shoji and Robert D. Waldron, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1266-

Optimal control methods

Control of Hysteretic System Using Velocity and Accelera-tion Feedbacks, J. N. Yang, Z. Li and S. C. Liu, EM Nov. 92, p2227-2245.

Design of Open-Channel-Contraction Transitions, Prabhata K. Swamee and Bharat C. Basak, IR May/June 94,

p660-668.

Frequency Domain Optimal Control Strategies for Aseismic Protection, B. F. Spencer, Jr., J. Suhardjo and M. K. Sain, EM Jan. 94, p135-158.

Generalization of Optimal Control Theory: Linear and Nonlinear Control, J. N. Yang, Z. Li and S. Vongchaval-itkul, EM Feb. 94, p266-283.

Generalized Optimal Active Control with Embedded and Half-space Soil-Structure Interaction, F. Y. Cheng, S. Suthiwong and P. Tian, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p337-346.

Instantaneous Optimal Control of Building Frames, C. C. Chang and Henry T. Y. Yang, ST Apr. 94, p1307-1326.

Lesson Learned form Implementing M&I Optimal Water Delivery, Otto J. Helweg and Lindell E. Ormsbee, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p730-733.

Next Generation Space Telescope. I: Design Considera-tions, B. Scott May and Nicholas P. Jones, AS Oct. 94,

p355-374.

Next Generation Space Telescope. II: Proposed Pointing Control System, B. Scott May and Nicholas P. Jones, AS Oct. 94, p375-397.

Optimal Control of Ground-Water Quality Management: Nonlinear Programming Approach, S. Álireza Taghavi, Richard E. Howitt and Miguel A. Mariño, WR Nov.J

Dec. 94, p962-982.

Optimal Groundwater Reclamation with Captial Costs, Teresa B. Culver and Christine A. Shoemaker, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p177-180.

Optimization of Reservoir Releases to Control River Sedi-mentation Using Differential Dynamic Programming, Carlos C. Carriaga and Larry W. Mays, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p13-16.

Optimal design

Algorithm for Siphon-operated LPD Sewage Manifolds, Dennis L. Kaiser, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p424-

Application of Heavy Duty Roadheaders for Underground Development of the Yucca Mountain Exploratory Study Facility, Jamal Rostami, Levent Ozdemir and David M. Neil, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p395-402.

Breakwater Design and Construction Harbor Centre Marina Sheboygan, Wisconsin, Tom Holtan, Dave Anglin, Dave Sanders and Larry Ryan, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred

A. Klancnik, ed., 1994), p292-299.

Design Optimization of Coventry Municipal Solid Waste Incinerator, V. Nasserzadeh, J. Swithenbank, C. Schofield, D. W. Scott, A. Loader and A. Leonard, EE Nov./Dec. 94, p1615-1629.

Designing Optimal Reliable Multiquality Water Supply Systems, Avi Ostfeld and Uri Shamir, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p270-274.

Determination of Geometry and Stress Distribution of an Optimal Stable Channel, Gregorio G. Vigilar, Jr. and Panayiotis Diplas, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994).

Empirical Performance Comparison for Symbolic and Sub-symbolic Learning Systems, Tomasz Arciszewski, Adam Borkowski, Tomasz Dybala, Janusz Racz and Piotr Wojan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1075-1082.

Limit Analysis and Optimal Design of Plates with Equilib-rium Elements, S. Krenk, L. Damkilde and O. Høyer, EM June 94, p1237-1254.

Model for Optimal Design of Reinforced Concrete Beam,

B. K. Chakrabarty, ST Nov. 92, p3238-3242.

Optimal Design of Base-Isolated Structures with Dynamic Absorbers, S. C. Sinha and Guangning Li, EM Feb. 94, p221-231.

Optimal Design of Structural Concrete Bridge Systems, M. Z. Cohn and Z. Lounis, ST Sept. 94, p2653-2674.

Optimal Shakedown Design of Circular Plates, F. Giambanco, L. Palizzolo and C. Polizzotto, EM Dec. 94, p2535-2555.

Optimum Curvature for Simple Horizontal Curves, Prianka N. Seneviratne and M. Nazrul Islam, TE Sept./Oct. 94, p773-786.

Optimum Design of Airport Enplaning Curbside Areas, Mahmoud S. Parizi and John P. Braaksma, TE July/Aug. 94, p536-551.

Progression of Computer Applications in Water Supply and Distribution Systems, Chun-Hou Orr, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p622-

Reinforced-Concrete Dimensioning Based on Element Nodal Forces, E. Anderheggen, Z. Despot, P. Steffen and S. M. R. Tabatabai, ST June 94, p1718-1731.

Reliability-Based Optimum Design for UBC and Nonde-terministic Seismic Spectra, C. C. Chang, J. F. Ger and F. Y. Cheng, ST Jan. 94, p139-160.

Water-Treatment-System Design for Turbidity Removal. I: Simulation, H. B. Dharmappa, S. Vigneswaran, J. Verink and O. Fujiwara, EE July/Aug. 94, p900-920. Water-Treatment-System Design for Turbidity Removal. II: Optimization, H. B. Dharmappa, O. Fujiwara, J. Verink and S. Vigneswaran, EE July/Aug. 94, p921-942.

Optimal use

Development of Hydro-Scheduling Model for Optimal Joint Operation of Multi-Reservoir Systems, S. B. Shim, J. W. Labadie, H. S. Lee, D. K. Koh and K. D. Shim, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p57-60.

Optimization

Analysis and Computation, Franklin Y. Cheng, ed., 1994, 0-87262-974-0, 398pp.

Analysis and Evaluation of Alternative Technologies, Simaan M. AbouRizk, Srinivasa R. Mandalapu and Miroslaw Skibniewski, ME May/June 94, p65-71.

Application of Structural Optimization, M. Z. Cohn and A. S. Dinovitzer, ST Feb. 94, p617-650.

Applications of Optimal Hydraulic Control to Ground-Water Systems, David P. Ahlfeld and Manoutchehr

Heidari, WR May/June 94, p350-365.

Aguifer Remediation Design: Nonlinear Programming and Genetic Algorithms, Daene C. McKinney, Gregory B. Gages and Min-Der Lin, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p254-257.

Augmented Lagrangian Genetic Algorithm for Structural Optimization, Hojjat Adeli and Nai-Tsang Cheng, AS

Jan. 94, p104-118.

Automated Construction-Simulation Optimization, Simaan AbouRizk and Jingsheng Shi, CO June 94, p374-385.

Automatic Truss Design by Optimized Growth, William Keith Rule, ST Oct. 94, p3063-3070.

Axisymmetric Plastic Plates with Ring Supports at Optimum Locations, C. M. Wang, S. K. Ting and W. A. M. Alwis, EM Feb. 94, p400-407.

Best Route GIS System, Siripong Malasri and L. Yu Lin, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p1123-1130.

Building Groundwater Optimizers That Respond to the Needs of Decision-Makers, David E. Dougherty, (Water Policy and Management: Solving the Problems, Darrell Fontane, ed. and Harry N. Tuvel, ed., 1994), p347-

Concurrent Genetic Algorithms for Optimization of Large Structures, Hojjat Adeli and Nai-Tsang Cheng, AS July

Conjunctive Operation of Hydroelectric and Thermal Power Plants, Ricardo Harboe, Tirtha Raj Gautam and Pushpa Raj Onta, WR Nov./Dec. 94, p778-793.

Data Management for Large-Scale Water-Distribution Op-timization Systems, S. Pezeshk, WR Jan./Feb. 94, p116-

Design of Branched-Water-Supply Network on Uneven Terrain, Brian Young, EE July/Aug. 94, p974-980.

Designing Under Uncertainty When We Can Reduce Uncertainty: When is Another Observation Worth the Cost? J. Wayland Eheart, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p461-464.

Dynamic Optimization by Small Variation of the System Layout, Zdzisław A. Parszewski, (Engineering, Con-struction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1492-1503.

Equilibrium Geometry of Channels with Cohesive Banks, R. G. Millar and M. C. Quick, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p964-968.

Estimation of Pavement-Layer Moduli Using Nonlinear Optimization Technique, Mustaque Hossain, John Zaniewski and Subramaniam Rajan, TE May/June 94,

Evaluating Multi-Purpose Reservoir Operations Using Fuzzy Dynamic Programming, Enrique Moncada, Dar-rell G. Fontane and Timothy K. Gates, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p111-114.

Evaluating Sensitivity of Hydraulic Control Optimization Models, David P. Ahlfeld and Jonathan D. Dombek, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p185-188.

Exploration as a Basis of Creative Engineering Design, John S. Gero, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p1824-1831.

Fast Monte Carlo Simulations and Safety Index Checking, A. Sellier and A. Mébarki, (Analysis and Computation,

Franklin Y. Cheng, ed., 1994), p260-265. Fouling of Nanofiltration Membranes by Natural Organic Matter, Francis A. DiGiano, Anne Braghetta, James Nilson and Bruce Utne, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p320-328.

Genetic Algorithms Compared to Other Techniques for Pipe Optimization, Angus R. Simpson, Graeme C. Dan-dy and Laurence J. Murphy, WR July/Aug. 94, p423-

Genetic Algorithms in Discrete Optimization of Steel Truss Roofs, Vlasis K. Koumousis and Panos G. Georgiou, CP

July 94, p309-325.

Genetic Algorithms in Groundwater Management, L. Srinivasa Reddy, (Hydraulic Engineering '94, George Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p293-297.

Global Network Optimization for Pavement Management, Kelvin C. P. Wang and John Zaniewski, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p474-482

Goal Programming Model for Distributing and Blending Desalinized Water, Abdulaziz S. Alidi and Taqi N. Al-

Faraj, WR May/June 94, p267-275.

Goal Programming Models for Determining Freshwater Inflows to Estuaries, Ning Mao and Larry W. Mays, WR May/June 94, p316-329.

Grey Dynamic Programming for Waste-Management Planning under Uncertainty, Guo H. Huang, Brian W. Baetz and Gilles G. Patry, UP Sept. 94, p132-156.

Groundwater Management and Systems Operations Optiroundwater Managentein and Systems operations of mization Utilizing Supply, Well Reliability, and Demand Distribution as Decision-Making Criteria, Kathlie Suyn Jeng and Jerry Rogers, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p77-80.

How to Optimize Frames Using Plastic Design Concept, Shahram Pezeshk, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p113-122.

How to Optimize Light-Gage, Cold-Formed Steel Beams, Scott A. Burns, (Analysis and Computation, Franklin Y.

Cheng, ed., 1994), p104-112.

Hybrid Structural Control for Seismic Safety, Michael A. Riley, Haluk Aktan, Satish Nagarajaiah and Andrei M. Reinhorn, (Analysis and Computation, Franklin Y.

Cheng, ed., 1994), p307-316. Improving Dynamic Finite Element Models Using Test Data, N. S. Khot and D. E. Veley, (Engineering, Con-struction, and Operations in Space IV, Rodney G. Gal-

loway, ed. and Stanley Lokaj, ed., 1994), p18-26.
Improving Reservoir System Operations Under Rights Requirements, L. E. Brazil, W. Liu, G. N. Day, D. P. Laurine and R. Steger, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p588-591.

Incorporating Economic Analysis in Irrigation Design and Management, Ujjayant Chakravorty and James

Roumasset, WR Nov./Dec. 94, p819-835.

Integration of Reliability, Uncertainty and Optimization in Hydraulics Systems: Classification of Problem Types, Kevin E. Lansey, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p262-265.

Integration of Reliability, Uncertainty and Optimization in Hydraulics Systems: Structural Reliability, Kevin E. Lansey, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel,

ed., 1994), p266-269.

Interdependence of Beach Fill Volumes and Repetition Intervals, Hans-H. Dette, Alfred Fuehrboeter and Arved J. Raudkivi, WW Nov./Dec. 94, p580-593.

Inverse Reliability Problem, Armen Der Kiureghian, Yan Zhang and Chun-Ching Li, EM May 94, p1154-1159. Irrigation Timing for Wheat Based on Climate, Crop, and Soil Data, R. P. Tripathi, IR May/June 92, p370-381.

Joint Optimization of Groundwater Remediation and Monitoring, Peter K. Kitanidis and Sang-Il Lee, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p525-528. Lake Ontario Regulation Utilizing an Expert System Ap-

proach Constrained by Interest Satisfaction Relationships, Anthony J. Eberhardt, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p149-152.

Large Deflection of Beams under Moment Gradient, S Chucheepsakul, S. Buncharoen and C. M. Wang, EM

Sept. 94, p1848-1860.

Lesson Learned form Implementing M&I Optimal Water Delivery, Otto J. Helweg and Lindell E. Ormsbee, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p730-733.

Machine Learning in Civil Engineering - Important Issues and Challenges, Benoît Julien, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p877-884.

Maintaining Reliability of Concrete Structures. II: Optimum Inspection/Repair, Yasuhiro Mori and Bruce R. Ellingwood, ST Mar. 94, p846-862.

Methodology for Optimum Sensor Locations for Parameter Identification in Dynamic Systems, Firdaus E. Udwadia,

EM Feb. 94, p368-390.

Microtasking, Macrotasking, and Autotasking for Structural Optimization, A. Saleh and H. Adeli, AS Apr. 94, p156-174.

Model of an Upgrade, Bruce Gall and Alan A. Smith, CE July 94, p60-62.

Mulitvariate Geostatistical Design of Ground-Water Monitoring Networks, Fethi Ben-Jemaa, Miguel A. Mariño and Hugo A. Loaiciga, WR July/Aug. 94, p505-522.

Multi-Reservoir Systems Optimization by the Aggrega-tion/Decomposition Methodology, M. Bessa, K. Pon-nambalam and A. Bogobowicz, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p192-196. Multicriteria Optimization in Engineering Design, Andrzej

Ameljańczyk, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p318-325.

Multiobjective Optimization of Actively Controlled Struc-

tures, S. S. Rao, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p276-285. New Methodology for Optimization of Freshwater Inflows to Estuaries, Yixing Bao and Larry W. Mays, WR Mar./

Apr. 94, p199-217

On some Problems of the Multicriteria Optimization of the Spatial Grid Structures, Jan A. Karczewski and Witold M. Paczkowski, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p162-171.

Optimal Capacity-Expansion Planning in Multiaquifer Sys-tems, Hakan Başağaoğlu and Hasan Yazıcıgil, WR

Nov./Dec. 94, p836-856.

Optimal Configuration of Active-Control Mechanisms, Mohamed Abdel-Mooty and John Roorda, EM Mar. 94, p535-556.

Optimal Control of Water-Supply Pumping Systems, Lin-dell E. Ormsbee and Kevin E. Lansey, WR Mar./Apr. 94, p237-252.

Optimal Design Conception of Grid Domes in Practice, Xue-Ren Hu and Young-Feng Luo, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p430-439

Optimal Groundwater Reclamation with Captial Costs, Teresa B. Culver and Christine A. Shoemaker, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p177-180.

Optimal Markup Policy in Sequential Competitive Bidding, Hongbin (Ben) Chen, Robert I. Carr and Photios G. Ioannou, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1548-1555.

Optimal Operation of Multiple-Reservoir System, Philip D. Crawley and Graeme C. Dandy, WR Jan./Feb. 93, p1-17. Optimal Operation of Soil Aquifer Treatment System, Zongwu Tang and Larry W. Mays, (Water Policy and Management: Solving the Problems, Darrell G. Fontane,

ed. and Harry N. Tuvel, ed., 1994), p441-444.

Optimal Pump Operations Considering Pump Switches,
Kevin E. Lansey and Kofi Awumah, WR Jan./Feb. 94,

Optimal Rehabilitation Model for Water-Distribution Systems, Joong Hoon Kim and Larry W. Mays, WR Sept./ Oct. 94, p674-692.

Optimal Supply of Parking at Airports, Massoud Javid and Prianka N. Seneviratne, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p174-182.

Optimization Analysis of Deficit Irrigation Systems, Francesco Mannocchi and Pompeo Mecarelli, IR May/June

Optimization and Reservoir Operations for the Missouri River, Inês C. L. Ferreira and Jay R. Lund, (Water Policy and Management: Solving the Problems, Darrell G.

Fontane, ed. and Harry N. Tuvel, ed., 1994), p3-96.
Optimization for Earthquake Loads, Kevin Z. Truman and Franklin Y. Cheng, Chanlysis and Computation, Franklin Y. Cheng, ed., 1994), p123-132.

Optimization of Concrete Drying Temperature for Monomer Impregnation, I. L. Al-Qadi, R. E. Weyers and T. Dutta, MT Feb. 94, p54-64.

Optimization of Controlled Structures: Using H., Theory, N. S. Khot and D. E. Veley, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p266-275.

Optimization of Freshwater Inflows to Lavaca-Tres Palacios, Texas, Estuary, Yixing Bao and Larry W. Mays, WR Mar./Apr. 94, p218-236.

Optimization of Reservoir Releases to Control River Sedi-Optimization of Reservoir Releases to Control River Sedimentation Using Differential Dynamic Programming, Carlos C. Carriaga and Larry W. Mays, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p13-16.
Optimization of Space Lattice Structures with Multimodal Frequency Constraints, J. Czyz and S. Lukasiewicz, Control Lettics and Tracing Structures, John E. Abel.

(Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p419-429.

Optimization of Space Trusses on Vector Multiprocessor, H. Adeli and H. -L. Hsu, AS Jan. 94, p120-126.

Definization of the Design and Operation of Soil Vapor Extraction Systems, Marshall W. Davert and William W-G. Yeh, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p181-184.

Optimizing Secondary Clarifier Performance: A Presenta-tion Outline, John K. Esler, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p202-208.

Parallel Algorithms for Integrated Structural/Control Optimization, A. Saleh and H. Adeli, AS July 94, p297-314. Personal Computer Model to Evaluate Performance of

Construction Systems/Services, Dean T. Kashiwagi, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p502-506.

Pipe Utility Evaluations With the Aid of GIS, Raymond A. Pittman, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p242-

Planning Model for Sewer System Rehabilitation, Edward H. Burgess, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p30-38. Processing of Lunar Materials, W. Howard Poist and B. D.

Fabes, AS July 94, p263-275.

Quality Management of Earthwork Using Knowledgebased Systems, Shrinath J. Kotdawala and Imad A (Computing in Civil Engineering, Khalil

Redundancy-Constrained Minimum-Cost Design of Water-Distribution Nets, Heekyung Park and Jon C. Liebman, WR Jan./Feb. 93, p83-98.

Regularized Method in Limit Analysis, Gong-Liang Jiang,

EM June 94, p1179-1197.

Reliability-Based Design of Prestressed Concrete Beam Ali S. Al-Harthy and Dan M. Frangopol, ST Nov. 94, p3156-3177.

Requirements for Applications of Robotics and Automation in Highway Maintenance and Construction Tasks, B. Ravani, S. A. Velinsky and T. H. West, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p356-364.

Risk and Reliability of Water Resources Infrastructure and Engineering Approaches to Risk and Reliability Analysis, Richard Males, (Risk-Based Decision Making in Water Resources VI, Yacov Y, Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p338-339.

Road-Maintenance Planning Using Genetic Algorithms. I: Formulation, W. T. Chan, T. F. Fwa and C. Y. Tan, TE

Sept./Oct. 94, p693-709.

SCADA System Controls Combined Sewer Overflow Regulation System to Optimize Wastewater Collection, Russell W. Batzel, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p822-828.

SELECTCRANE: An Expert System for Optimum Crane Selection, Awad S. Hanna, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p958-963.

Sensitivity Analysis of Reliability-Based Optimal Solution, Ib Enevoldsen, EM Jan. 94, p198-205.

Sensitivity and Optimum Structural Design, Witold Gutkowski and Jacek Bauer, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p330-339.

Simulating Structural Analysis with Neural Network, James L. Rogers, CP Apr. 94, p252-265.

Simultaneous Routing and Siting for Hazardous-Waste Op-

erations, Timothy L. Jacobs and John M. Warmerdam, UP Sept. 94, p115-131. Spacecraft Wall Design for Orbital Debris Impact, Shyh-

Rong Tzan and Chris P. Pantelides, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p378-387.

SQP Methods for Inverse Airfoil Design, Carlos Orozco and Omar Ghattas, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p297-306.

Steel Raw Water Pipeline Design Development, Steven J. Troch, Roger Strube and Lynn Hill, (Hydraulics of Pipe lines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p473-491.

Structural Analysis for Structural Design, D. E. Grierson, (Analysis and Computation, Franklin Y. Cheng, ed.,

1994), p133-144.

Sustainable Management of Existing Reservoirs, Slobodan P. Simonovic, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p242-245

Topology Optimization of Plate and Shell Structures, K. Maute and E. Ramm, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p946-955.

Uncertainties in Flow Modeling and Forecasting for Niaga-

ra River, Randy D. Crissman, Chao-Lin Chiu, Weizu Yu, Kazumasa Mizumura and Ion Corbu, HY Nov. 93, p1231-1250.

Uncertainty in Reservoir Operation Optimisation, Kevin S. Tickle and Ian C. Goulter, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p363-367.

Verification Testing of Multi-Purpose Rail Cask Impact Limiters, Charles J. Temus, Ian D. McInnes, Ken Miller and Robert A. Johnson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p452-456.

Wastewater Treatment Optimization Model for Developing World II: Model Testing, S. L. Tang and K. V. Ellis, EE

May/June 94, p610-624.

Weighted Feedback for Groundwater Remediation, C. A. Shoemaker, G. J. Whiffen and J. A. Denu, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p189-192.

Width and Depth-Constrained Best Trapezoidal Section, David C. Froehlich, IR July/Aug. 94, p828-835.

Optimization models

Chance Constrained Model Using Kinematic Wave Routing for Stormwater Infrastructure Rehabilitation, Timothy L. Jacobs and Miguel A. Medina, Jr., (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Commit-tee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p39-54.

Critical Loads and Development of Acid Rain Control Op-tions, Hugh Ellis and Michael L. Bowman, EE Mar./Apr.

94, p273-290.

A Decision Support System for Multi-Purpose Reservoir Operations, S. B. Shim, H. S. Lee, K. K. Koh, K. D. Shim and D. G. Fontane, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p303-306.

M. Tuver, ed., 1994), p. 203-303.

Methods for Risk and Reliability Analysis, Larry W. Mays, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene

L. Stakhiv, ed., 1994), p26-44.

Modeling to Generate Alternatives in Discrete Structural Optimization, John W. Baugh, Jr., E. Downey Brill, Jr. and Shannon C. Caldwell, (Computing in Civil Engi-neering, Khalil Khozeimeh, ed., 1994), p310-317.

Multi-Attribute Rehabilitation of Storm or Combined Sewer Systems, Santiago M. Reyna, Jacques W. Delleur and Jorge A. Vanegas, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p55-72

Multi-Objective Optimization of Construction Schedules, Tadeusz Kasprowicz, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p185-190.

Optimal Land Allocation for Solid- and Hazardous-Waste Landfill Siting, S. Diane Minor and Timothy L. Jacobs, EE Sept./Oct. 94, p1095-1108.

Optimal Operation of Ground-Water Supply Distribution Systems, S. Pezeshk, O. J. Helweg and K. E. Oliver, WR

Sept./Oct. 94, p573-586.

Optimization Studies of Anaerobic Expanded Bed Reactor Pretreatment of Domestic Wastewater, Thomas L. Theis, Bruce J. Alderman and Anthony G. Collins, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p289-296.

Optimizing River Diversion under Hydraulic and Hydrologic Uncertainties, Abbas Afshar, Ahmad Barkhordary and Miguel A. Mariño, WR Jan./Feb. 94, p36-47.

Optimum Operation of Recharge Basins, Hasan Mushtaq, Larry W. Mays and Kevin E. Lansey, WR Nov./Dec. 94,

p927-943. Regional Optimization of Non-Point Source Load Reduction, J. Thomas Franques and Rhonda L. Townsend, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p262-266.

Reservoir Operation by the Use of an Expert System, Tiao J. Chang and David Moore, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p97-104.

Scada System Requirements for Optimum Pumping, Vilas Nitivattanannon, Elaine C. Sadowski and Rafael G. Quimpo, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p110-114.

orbits

Solar Power Satellites, Sean Russell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p793-798.

System for Orbital Recovery of Space Shuttle's External Tank, Raul Ferri, AS Jan. 94, p92-103.

Water 2050-Supply for the Portland, Oregon Metropolitan Region Using the Integrated Resource Planning Process, Lorna Stickel, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuyel, ed., 1994), p230-233.

Organic carbon

Evaluation of Enhanced Coagulation for DBP Control,
Richard J. Milltner, Sheila A. Nolan, Marcus J. Dryfuse
and R. Scott Summers, (Critical Issues in Water and
Wastewater Treatment, Joseph N. Ryan, ed. and Mare
Edwards, ed., 1994), p484-491.

Investigations of Potential Radical Interaction in the Formation of Brominated Organic Compounds in Water, Rengao Song, Adam Eyring and Roger Minear, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p467-475

Minimization of Multistage RBC Active Disc Area, Roland Leduc and lan Buchanan, EE Mar./Apr. 93, p271-286. NCASI Experiment Related to Validation of Equilibrium

Partitioning (EP) Theory, Steven W. Hinton, (Critical Isrardinoning (Er) Theory, Steven W. Finnon, Critical issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p737-742.
Pilot-Scale Demonstration of Sediment Washing, Jim E.

Galloway and Frank L. Snitz, (Dredging '94, E. Clark

McNair, Jr., ed., 1994), p981-990.

Preliminary Screening Studies for Dredge Disposal Options, Howard L. Cumberland, Barry J. Snyder and Wil-liam C. Lester, (Dredging '94, E. Clark McNair, Jr., ed.,

1994), p342-348.
A Probability Based Approach to the Design and Operation of Soil Vapor Extraction Systems, Kenneth K. Kebbell and William F. McTernan, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p564-571.

Organic chemicals

Estimating Toxicity of Organic Chemicals to Activated-Sludge Microorganisms, B. Sun, N. Nirmalakhandan, E. Hall, X. H. Wang, J. Prakash and R. Maynes, EE Nov./ Dec. 94, p1459-1469.

Process Selection for Treatment of SOC Contaminated Waters, Bruce I. Dvorak, Desmond F. Lawler and Gerald E. Speitel, Jr., (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p601-608.

Remediation of Contaminated Soils by Solvent Flushing, Denie C. M. Augustijn, Ron E. Jessup, P. Suresh C. Rao and A. Lynn Wood, EE Jan/Feb. 94, p42-57.

Organic compounds

Activated Carbon as a Catalyst for Polymerization of Phenolic Compounds, Jacob A. Bourdeau and Radisav D. Vidic, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p756-763.

Coffee, Tea or Clean Water?, CE May 94, p8.
Computer Aided Design of Trickling Filters, Bruce E.
Logan, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p678-685.

Development of a Model for the ABF/AS Process, Julian Sandino and Ross E. McKinney, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p686-693.

Experimental Data and Modeling for Surfactant Micelles, HOCs, and Soil, David A. Edwards, Zhongbao Liu and Richard G. Luthy, EE Jan./Feb. 94, p23-41.

In Situ Sediment Treatment of Dofasco Boatslip, Hamilton Harbour, Tom Murphy, Henry Brouwer and Jay Babin, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1071-1080

The Performance of Unconfined Hollow Fiber Membranes as Pipe Flow and Mixed Flow Aerators, Drew W. Johnson and Michael J. Semmens, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p106-113.

Prediction and Verification of Atrazine Adsorption by PAC, Shaoying Qi, Samer S, Adham, Vernon L. Snoey-ink and Ben W. Lykins, Jr., EE Jan./Feb. 94, p202-218. Surfactant Solubilization of Organic Compounds in Soil/

Aqueous Systems, David A. Edwards, Zhongbao Liu and Richard G. Luthy, EE Jan./Feb. 94, p5-22

Use of Expert Systems in Selecting Equilibrium Isotherms of Organic Compound Adsorption on Activated Carbon, Imad A. Basheer and Shrinath Kotdawala, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p640-643.

Organic matter

Adsorption of 1,1,2-Trichloroethane from River Water, Roberto M. Narbaitz and Andrew Benedek, EE Nov./ Dec. 94, p1400-1415.

Benzene Transport Through Landfill Liners Containing Organophilic Bentonite, James A. Smith and Peter R. Jaffé, EE Nov./Dec. 94, p1559-1577.

Biodegradation of Phenanthrene in Sand Columns in the Presence of Nonionic Surfactants, David Norris and Tariq Ahmed, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p360-367

Biofilm Sorption of Natural Organic Material, Gary Carlson and JoAnn Silverstein, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare

Edwards, ed., 1994), p460-466.

C_{el}C_c Concept Applied to Compression of Peat, Patrick J. Fox, Tuncer B. Edil and Li-Tus Lan, GT Aug. 92,

p1256-1263.

Computer simulation of pulsed pumping for remediation under mass transfer limited conditions, Z. Jiang and W. P. Ball, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p352-359.

Control of Disinfection By-Products in Drinking Water, Philip C. Singer, EE July/Aug. 94, p727-744.

Fouling of Nanofiltration Membranes by Natural Organic Matter, Francis A. DiGiano, Anne Braghetta, James Nilson and Bruce Utne, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p320-328.

Modeling of Biofiltration of Natural Organic Matter in Drinking Water Treatment, Jack Z. Wang and R. Scott Summers, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed.,

1994), p452-459.

NCASI Experiment Related to Validation of Equilibrium Partitioning (EP) Theory, Steven W. Hinton, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p737-742.

Performance of Fill that Contains Organic Matter, Robert W. Day, CF Nov. 94, p264-273

Pilot Test on Groundwater Organics Removal by Low-Pressure Membranes, Paul Fu, Hector Ruiz, Ken Thompson and Carl Spangenberg, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p336-343.

Properties of High Fly Ash Content Cellular Concrete, Ronald D. Neufeld, Luis E. Vallejo, Wenyi Hu, Martin Latona, Christopher Carson and Christopher Kelly, EY Apr. 94, p35-48.

Organization theory

Business Reengineering in a South American Oil Company, Matilde G. de Pena and Deborah J. Fisher, ME July/ Aug. 94, p45-51.

Redesigning Job Site Planning Systems, Glenn Ballard, Gregory Howell and Saied Kartam, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1564-

Value of Concurrent Engineering for A/E/C Industry, Jesus M. de la Garza, Primo Alcantara, Jr., Munish Kapoor and P. S. Ramesh, ME May/June 94, p46-55.

Organizational policy

How do Integration and Data Models Add Value to a Project? Martin Fischer, Thomas Froese and Douglas Phan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p992-997.

Limits of Reasonable Planning, Carlos M. H. Stegmann, El July 94, p246-253.

'Rego' Starts at Burec, CE June 94, p8.

Consolidation in the Environmental Engineering Industry, Paul J. Zofnass, ME May/June 94, p13-17.

Limits of Reasonable Planning, Carlos M. H. Stegmann, El July 94, p246-253.

Still More Concerns, Worries, and Wringing of Hands, Charles S. Hodge, CC Mar. 94, p10-11.

Orientation

Effect of Orientation of Approach Slabs on Pavement Deformation, H. K. W. Wong and J. C. Small, TE July/Aug. 94, p590-602.

Orthotropic

Analytical Solution for Bending of Coaxial Orthotropic Cylinders, Claude Jolicoeur and Alain Cardou, EM Dec. 94, p2556-2574.

Study on Structural Characteristics of Air-Inflated Beam Structures, Masaya Kawabata and Kazuo Ishii, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p742-751.

Orthotropic plate

Finite Element Modeling of Continuous Posttensioned Voided Slab Bridges, Rajan Sen, Mohsen Issa, Xianghong Sun and Antoine Gerges, ST Feb. 94, p651-

Free-Vibration Analysis of Point-Supported Orthotropic Plates, D. J. Gorman, EM Jan. 94, p58-74.

Hurricane Iniki and Typhoon Omar Meteorology, Thomas A. Schroeder, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p84-91.

Impact Hydraulic Jump, Willi H. Hager, HY May 94,

p633-637.

Nonlinear Stability of Differential Surge Chambers, Xiao-Liang Yang and Chen-Shan Kung, HY Nov. 92, p1526-

Wave-Induced Oscillation in Harbor with Porous Break-waters, Xiping Yu and Allen T. Chwang, WW Mar./Apr. 94, p125-144.

Single-Degree-of-Freedom Nonlinear Homogeneous Systems, José A. Inaudi, George Leitmann and James M. Kelly, EM July 94, p1543-1562.

Oscillatory flow

Combined Oscillatory and Steady Flow Over Ripples, K. I. Mahesha Ranasoma and John F. A. Sleath, WW July/ Aug. 94, p331-346.

Cross-Flow Vibrations of Cylinder in Irregular Oscillatory Flow, Andrzej Kozakiewicz, B. Mutlu Sumer and Jørgen Fredsøe, WW Nov./Dec. 94, p515-534.

Distribution of Suspended Sediment over Wave-Generated Ripples, Erik Asp Hansen, Jørgen Fredsøe and Rolf Deigaard, WW Jan./Feb. 94, p37-55.

Hydrodynamic Processes on the Lower Shoreface of the Dutch Coast, Piet Hoekstra and Klaas T. Houwman, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p852-

East River Modeling of Water Quality for Multiple-Project Assessments, Guy Apicella, Robert Norris, Johanna Newton, Walter Ewald and Angelika Forndran, (Estuareme and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p235-248.

Field Tests on Small Marine Outfall, James J. Sharp, EE

Mar./Apr. 94, p471-477.

General Urban Runoff Model for Water Quality Investiga-tions, Robert E. Pitt, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1213-1218.

Hydraulics of Seawater Purging in Tunneled Wastewater Outfall, E. Eric Adams, Dipak Sahoo, Christopher R. Liro and Xueyong Zhang, HY Feb. 94, p209-226.

Initial Dilution of Southeast Florida Ocean Outfalls, John R. Proni, Hening Huang and William P. Dammann, HY Dec. 94, p1409-1425.

Innovative Design of a Multiport Diffuser, Mindy I Roberts and Bernadette H. Kolb, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p56-65.

Modeling of Deep Water Outfall Plumes in the East Australian Coastal Ocean, Ian P. King, William L. Peirson and Bruce A. Cathers, (Estuarine and Coastal Modeling III. Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p71-85.

Near Field Behavior of a Far Field Circulation Model, Xueyong Zhang, Eric Adams, Alan Blumberg, Z. G. Ji and Kirk Ziegler, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

p155-159.

Offshore Rescue, Jonathan A. French, Paul Gustafson, John S. Murk and Kellene M. Burn-Lucht, CE Oct. 94, p42-

Outflows

Climate Warming and Great Lakes Management, Benjamin F. Hobbs, Philip T. Chao, Mohammed Nayal and William T. Bogart, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p295-316.

Interactive Models for the Regulation of Lake Ontario, Anthony J. Eberhardt, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

p105-109.

A Nearshore Model for Cleveland CSO Remediation Design Selection, David P. Podber, Chieh-Cheng J. Yen, sign Selection, David F. Poubel, Clinical Regenmorter, Keith W. Bedford and Onyx W. H. Wai, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p222-226.

Observations of Water Movement in a Block of Fractured Welded Tuff, Falah Thamir, Edward M. Kwicklis, David Hampson and Steve Anderton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2020-2029.

Step-Function Response of Muskingum Reach, J. C. I. Dooge, M. Perumal and Q. J. Wang, IR Mar./Apr. 93,

p410-415.

Verification of Lake Superior Outflow Equations, Scott J. Thieme, (*Hydraulic Engineering* '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p462-466

Outwash

Estimation of V_{0max}, and Identification of the Iniki

Overwash Line on Kaua'i, C. H. Fletcher, T. A.

Schroeder, G. M. Barnes, B. M. Richmond and M. A. Hampton, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p746-755.

Overconsolidated clays

Formulation of MIT-E3 Constitutive Model for Overconsolidated Clays, Andrew J. Whittle and Michael J. Kavvadas, GT Jan. 94, p173-198.

Influence of Horizontal Stresses on Gilgai Landforms, Britt Maxwell, GT Aug. 94, p1437-1444.

Overconsolidation

Preconsolidation versus Aging Behavior of Kaolinite Clay, G. A. Athanasopoulos, GT June 93, p1060-1066.

Characteristics of Circular-Crested Weir, Amruthur S. Ramamurthy and Ngoc-Diep Vo, HY Sept. 93, p1055-

Computer Control of CSOs, Russell W. Batzell, CE Nov. 94, p58-59.

CSO Rehabilitation Strategies for Urban Areas, Edward H. Burgess and Larry A. Roesner, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p184-193.

East River Modeling of Water Quality for Multiple-Project Assessments, Guy Apicella, Robert Norris, Johanna Newton, Walter Ewald and Angelika Forndran, (Estua-Newton, watter Ewald and Angelina Formatin, testina-rine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p235-248.

EPA Orders National Strategy on Sewer Overflows to Ease Water Pollution, NE Aug. 94, p15.

Existing Sewer Evaluation and Rehabilitation, Second Edition, Second edition (M&R No. 62), Joint Task Force of the Water Environment Federation and the American Society of Civil Engineers, (B. Jay Schrock, chmn.), 1994, 0-7844-0049-0, 270pp.

Flow Analysis Used to Diagnose Pipe Capacity and Sewer Overflow Problems in Sydney, Australia, Patrick A. Hayes, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p439-451.

An Improved Design of Fishways Under High Variation of Headwater, Kuo-Cheng Hsieh, Sue-Jen Wu and Cheyuan Huang, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p457-

The Light at the End of the Sewer: How Interested Parties Negotiated a Consensus Solution to the Combined Sewer Overflow Problem, David S. Bailey, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p204-210.

Overflow Elimination Benefits from GIS Based Technology, Rod Thornhill, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p829-835.

QUAL2E Simulations of Pulse Loads, Raymond Walton and Mary Webb, EE Sept./Oct. 94, p1017-1031.

Risk Analysis: Wet Weather Flows in S.E. Michigan, Jonathan W. Bulkley, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p89-101.

SCADA System Controls Combined Sewer Overflow Regulation System to Optimize Wastewater Collection, Russell W. Batzel, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p822-828.

The Continuing Saga of Home-Office Overhead Claims, CE July 94, p32.

Overland flow

A Control Volume Finite Element Method for the Solution of 2-D Overland Flow Problems, P. Di Giammarco and E. Todini, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p82-101.

Critical Rainfall Duration for Maximum Discharge from Overland Plane, Charng-Ning Chen and Tommy S. W. Wong, HY Sept. 93, p1040-1045.

Determination of Watershed Features for Surface Runoff Models, N. K. Garg and D. J. Sen, HY Apr. 94, p427-

Non-Point-Source Pollution from Interrill Flow Areas, A. Parr, S. Limback, B. McEnroe and S. Zou, IR Nov./Dec. 94, p1056-1066.

Sheet Flow Resistance of Asphaltic Pavements, Joseph R. Reed, John C. Warner and Richard S. Huebner, (Hydraulic Engineering) '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1100-1104.

Spatially Averaged Conservation Equations for Interacting Rill-Interrill Area Overland Flows, Gokmen Tayfur and M. Levent Kavvas, HY Dec. 94, p1426-1448.

Overloads

Critique of Commercial Structures, Herbert S. Saffir, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p472-475.

Distress in Prestressed Concrete Roof Girders at a Cement Plant, W. P. S. Dias, A. D. C. Jayanandana, M. C. M. Fonseka and A. A. D. A. J. Perera, CF Feb. 94, p6-15.

Statistical Evaluation of Truck Overloads, Jamshid Mohammadi and Nadir Shah, TE Sept./Oct. 92, p651-665

Overtopping

Air Concentration Measurements in Highly-Turbulent Flow on a Steeply-Sloping Chute, James F. Ruff and Kathleen H. Frizell, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p999-1003.

- Alternatives for Overtopping Protection of Dams, Task Committee on Overtopping Protection of the Hydraulics Division of the American Society of Civil Engineers, (Noel R.(Randy) Oswalt, chmn.), 1994, 0-7844-0004-0, 140pp.
- Irregular Wave Overtopping of Revetments in Surf Zones, Nobuhisa Kobayashi and Andrew W. Raichle, WW Jan./Feb. 94, p56-73.
- Kinematics of Wave Overtopping on Marine Structure, J. J. Lee, F. Zhuang and C. Chang, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p821-834.
- Study on the Sand Deposited Behind the Detached Breakwaters, Wen-Juinn Chen and Ching-Ton Kuo, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p938-949.
- Wave Deformation in Front of Vertical Wall due to Wave Overtopping, Motohiko Umeyama, WW Sept./Oct. 94, p490-498.
- West Columbus, OH LPP Gate Closure Analysis A Study of the Requirements for Multiple Closures, Kenneth C. Halstead and Surya Bhamidipaty, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p472-476.

Owners

- Cultivating Stakeholder Interaction in Emergency Management, Wallace J. Weaver and Loretta F. Brownell, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p188-192.
- Earning Empowerment From Stakeholders, Peter T. Johnson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p258-262.
- Engineering Management and Project Triangle, John C. Bishop and E. Casey Madden, ME July/Aug. 94, p24-27.
- Industrial Facility Quality Perspectives in Owner Organizations, Kelly Jean Fergusson and Paul Teicholz, CF May 94, p89-109.
- Knowledge-Based Design of Project-Procurement Process, R. A. Mohsini, CP Jan. 93, p107-122.
- Model for Constructability Approach Selection, John G. Gugel and Jeffrey S. Russell, CO Sept. 94, p509-521.
- Negotiating Equity for Management of DOE Wastes, Sam A. Carnes, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), pl-8.
- Ownership Transfer of Design Engineering/Construction Firms, James J. Casey, Jr. and Jeffrey S. Russell, ME Mar./Apr. 94, p66-67.
- A Parameter Network and Model Pyramid for Managing Technical Information Flow, Scott Sinnock and Hollister A. Hartman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p306-314.
- Technical and Institutional Features of High-Level Radioactive Waste Management: Searching for Common Ground, Tom Isaacs, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p263-266.
- Toward Integrated Design of Waste Management Technologies, Sam A. Carnes and Amy K. Wolfe, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p267-274.

Oxidation

- Arsenic Removal by Manganese Greensand Filters, Thon Phommavong and T. Viraraghavan, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p646-653.
- Effects of Oxidant on Thermal Regeneration of Granular Activated Carbon, Mark A. Waer and Vernon L. Snoeyink, EE Jan./Feb. 94, p190-201.
- ORP Measurement in Anaerobic Systems Using Flow-Through Cell, Munish Gupta, Ashutosh Gupta, Makram T. Suidan, Gregory D. Sayles and Joseph R. V. Flora, EE Nov/Dec. 94, p1639-1645.

- Precipitation Kinetics of Radioactive Elements and Their Effect Upon Redox Conditions of the Nearfield, Hiroyasu Takase and Peter Grindrod, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p491-500.
- gram Committee, 1994), p491-500.

 Preliminary Spent LWR Fuel Oxidation Source Term Model, R. E. Einziger, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p554-559.
- Process Selection for Treatment of SOC Contaminated Waters, Bruce I. Dvorak, Desmond F. Lawler and Gerald E. Speitel, Jr., (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p601-608.
- Sensitized Photooxidation of Dissolved Sulfides in Water, T. F. Brewer, J. G. Curtis, E. A. Marchand, V. D. Adams and E. J. Middlebrooks, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), P233-240.
- The Use of Iron Salts to Control Dissolved Sulfide in Districts' Trunk Sewers, Navnit A. Padival, William A. Kimbell and John A. Redner, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p743-750.

Oxidation ponds

- Assessment of BNR Systems in Florida, Richard O. Mines, Jr. and C. William Woods, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p436-443.
- Automated ORP Control for Aerobic/Anoxic Cycling in Oxidation Ditch Treatment, Thomas E. Coleman, H. David Stensel, Darrel Fleischman and W. Brent Denham, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p444-451.

Oxygen

- Carbon Formation Theory for Space Oxygen Processes, Peter E. Nolan, Andrew Hall Cutler and David C. Lynch, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1199-1209.
- Effects of Molecular Oxygen and pH on the Adsorption of Aniline to Activated Carbon, Peter Fox and Kamalesh Pinisetti, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p617-623.
- For the Realization of Lunar Concrete, Hiroshi Kanamori, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p942-951.
- The Influence of Kiln Atmosphere on Clinker Characteristics, F. P. Sorrentino, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p65-78.
- Kinetic Interpretations of First Reactivity Experiments on Lunar Basalt Samples, M. A. Gibson, C. W. Knudsen, D. J. Brueneman and H. Kanamori, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1167-1177.
- Lunar ISRU: An Evolutionary Approach, John L. Paterson, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1077-1085.
- Lunar Oxygen Production A Maturing Technology, Carlton C. Allen, Gary G. Bond and David S. McKay, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1157-1166.
- Lunar Oxygen Production in a Hydrogen "Cold" Plasma, Daniel E. Bullard, Peter E. Nolan and David C. Lynch, (Engineering, Construction, and Operations in Space IV. Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1188-1198.
- Overview of Space Environmental Effects, Alan J. Watts, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p628-637.

Oxygen from Lunar Soil via Fluorination, Wolfgang Seboldt, Stephan Lingner, Stephan Hoernes and Wolfgang Grimmeisen, (Engineering, Construction, and Operations in Space IV, Rodney G, Galloway, ed. and Stanley Lokaj, ed., 1994), p1210-1219.

Oxygen Generation from Synthetic Moon Soil Using a Plasma Reactor, P. R. Taylor, S. A. Pirsada, K. A. Prisbrey, H. Gold and R. E. Hicks, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1178-1187.

Oxygen Utilization of Trickling Filter Biofilms, Steven W. Hinton and H. David Stensel, EE Sept./Oct. 94, p1284-1297.

A Remote Sensing Evaluation of Lunar Pyroclastic Deposits, B. Ray Hawke and Cassandra R. Coombs, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1008-1019.

Oxygen demand

Design and Testing of Two Ice-Preserving Winter Lake Aeration Systems, Christopher R. Ellis and Heinz G. Stefan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1326-1330.

Effect of Flow Velocity on Sediment Oxygen Demand: Theory, Yoshiyuki Nakamura and Heinz G. Stefan, EE Sept./Oct. 94, p996-1016.

Oxygen transfer

Computer Aided Design of Trickling Filters, Bruce E. Logan, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p678-685.

Development of a Model for the ABF/AS Process, Julian Sandino and Ross E. McKinney, Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p686-693.

Modeling Full-Scale Diffused Aeration Systems, Terry L. Johnson and Ross E. McKinney, Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p702-709.

Oxygen Transfer in Bubbly Turbulent Shear Flow, Kyung Soo Jun and Subhash C. Jain, HY Jan. 93, p21-36.

Oxygen Utilization of Trickling Filter Biofilms, Steven W. Hinton and H. David Stensel, EE Sept./Oct. 94, p1284-1297

Oxygenation

Oxygen Transfer in Bubbly Turbulent Shear Flow, Kyung Soo Jun and Subhash C. Jain, HY Jan. 93, p21-36.

Vortex Convection Produced by V-Shaped Dihedral Obstruction, Takashi Asaeda, Pham Hong Son and Steven Armfield, HY Nov. 94, p1274-1291.

Ozone

At Maine Water-Treatment Plant, It's Ozone Only, CE May 94, p12-13.

Chemical Inactivation of Cryptosporidium Parvum in Drinking Water, Gordon R. Finch and E. Kathleen Black, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p42-49.

Emissions, Ambient Concentrations, and Potential Health Hazards of VOCs from Wastewater Treatment, Jin-Sheng Lin and Lynn M. Hildemann, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p580-584.

Kinetics of Ozone Disinfection in Completely Mixed System, Hongde Zhou and Daniel W. Smith, EE July/Aug. 94, p841-858.

Modeling of Dissolved Ozone Concentration Profiles in Bubble Columns, Hongde Zhou, Daniel W. Smith and S. J. Stanley, EE July/Aug. 94, p821-840.

The World is Coming to an End: E. B. Rice Memorial, William L. Ryan, CR Sept. 94, p87-92.

Ozonization

Biofilm Sorption of Natural Organic Material, Gary Carlson and JoAnn Silverstein, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p460-466.

Investigations of Potential Radical Interaction in the Formation of Brominated Organic Compounds in Water, Rengao Song, Adam Eyring and Roger Minear, Certical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p467–475.

Nation-Wide Bromide Occurrence and Bromate Formation Potential in Drinking Water Supplies, P. Westerhoff, M. Siddiqui, J. Debroux, W. Zhai, K. Ozekin and G. Amy, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p670-677.

Ozonation as an Alternative to Mandatory Filtration, Dimitrios Katehis, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed.,

1994), p384-391.

Ozonization of Anaerobic Sludge Dewatering Centrate for Ammonia Removal, K. Ramalingam, V. Diyamandoglu and J. Fillos, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p423-427.

Treatment of Drinking Water Containing Bromate and Bromide Ions, Taha F. Marthaba and Steven J. Medlar, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p476-483

Painting

456

A Feature Based Path Planning System for Robotic Stenciling of Roadway Markings, H. Kochekali and B. Ravani, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p52-60.

Guide to Painting Steel Structures to be Published, CE Nov. 94, p21-22.

Looking for Solutions to the Lead-Paint Crisis, CE Aug. 94, p19,21.

Microwave Process Strips Structures of Lead Paint Safely and Cheaply, ET Apr./May 94, p1,3.

Paleoclimatology

Isotopic Studies of Yucca Mountain Soil Fluids and Carbonate Pedogenesis, Ted A. McConnaughey, Joseph Whelan, Kimberley P. Wickland and Richard J. Moscati, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2584-2589.

Late Glacial to Modern Climate Near Yucca Mountain Nevada, Richard M. Forester, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2750-2754.

Paleoclimate Validation of a Numerical Climate Model, F. Joseph Schelling, Hugh W. Church, Bernard D. Zak and Starley L. Thompson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2746-2749.

Paleoclimatic and Paleohydrologic Records From Secondary Calcite: Yucca Mountain, Nevada, Joseph F. Whelan, David T. Vaniman, John S. Stuckless and Richard J. Moscati, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p.738-2745.

Paleogeology

Inferences of Paleoenvironment From Petrographic, Chemical and Stable-Isotope Studies of Calcretes and Fracture Calcites, David T. Vaniman and Joseph F. Whelan, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2730-2737.

Late Holocene Climate Derived From Vegetation History and Plant Cellulose Stable Isotope Records From the Great Basin of Western North America, Peter E. Wigand, Martha L. Hemphill and Sikha (Manna) Patra, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2574-2583.

Palaeohydraulic reconstruction of floods in upland UK bedrock streams: progress, problems and prospects, Paul A. Carling, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p860-864. Potential of Vertebrate Studies for Assessing Past Climate Variations, Stephanie D. Livingston, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p2562-2568.

Preliminary Results of Paleoseismic Investigations of Quaternary Faults on Eastern Yucca Mountain, Nye County, Nevada, C. M. Menges, J. R. Wesling, J. W. Whitney, F. H. Swan, J. A. Coe, A. P. Thomas and J. A. Oswald, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2373-2390

Preliminary U-Series Disequilibrium and Thermolumines-cence Ages of Surficial Deposits and Paleosols Associated with Quaternary Faults, Eastern Yucca Mountain, J. B. Paces, C. M. Menges, B. Wildmann, J. R. Wesling, C. A. Bush, K. Futa, H. T. Millard, P. B. Maat and J. W. Whitney, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2391-2401.

Tree-Rings and Climate: Implications for Great Basin Paleoenvironmental Studies, Donald A. Graybill, M. R. Rose and Fred L. Nials, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2569-2573.

Paleohydrology

Mulitlevel Model for Gage and Paleoflood Data, Ellen W. Stevens, WR July/Aug. 94, p444-457.

Analysis of Composite Panels Using Newton's Method, Norman F. Knight, Jr., (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p147-155.

Statics Local Conference of the Masonry Infills, Ghassan Al-Chaar, Richard Angel and Daniel P. Abrams, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p791-796.

Hygrothermal Effects in Composite Sandwich Panels, Charles E. S. Ueng and Jonathan D. Sherrill, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p306-315.

Lateral Bracing Criteria of the Composite Braces, Kazuo Inoue, Yasuo Higashibata and Kazuhiro Inoue, (Structures Congress XII, N. C. Baker, ed. and Barry J. Lood-

no, ed., 1994), p152-157.

Postbuckling Response of Doubly-Curved Shallow Panels Under Complex Loading Conditions, L. Librescu and M. Y. Chang, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p116-126.

Reliability Analysis of Stiffened Panels, E. Nikolaidis, O. Hughes, B. M. Ayyub and G. J. White, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p1466-1471.

Review of Cold-Formed Steel Purlin Design, Roger A. La-Boube, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1578-1580.

Simulation of Blast Pressure on Flexible Panels, Avinash C. Singhal, Debra Larson, Sanjay Govil and Vikram Karmakar, ST July 94, p2011-2020.

Testing of Concrete Curtain Wall Panels Reinforced with FRP Grids, Edwin R. Schmeckpeper, Richard Nielsen and Charles H. Goodspeed, (Structures Congress XII, N. . Baker, ed. and Barry J. Loodno, ed., 1994), p1250-1255.

Paper industry

Control of Aging Processes in Wastepaper Fiber Reinforced Cement, Parviz Soroushain, Jong-Pil Won and Jer-Wen Hsu, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p539-544.

Paper mills

Paper Sludge Can Cap Landfills, ET Dec. 94/Jan. 95, p5.

Parabolic bodies

Safety Grates in Supercritical Channels, Julia E. Allred-Coonrod, IR Jan./Feb. 94, p218-224.

Tension Element to Reduce Loads in Rim Support of Inflatable Reflector, Gershon Grossman, AS Apr. 94, p129-142.

Parallel processing

Concurrent Genetic Algorithms for Optimization of Large Structures, Hojjat Adeli and Nai-Tsang Cheng, AS July 94, p276-296.

Finite-Element Calculations on Alliant FX/80, Brian C. Watson and Manohar P. Kamat, AS Oct. 94, p446-462.

I.P.L. Space Trusses: Structural Performance and Analysis, M. Burt, D. Shriftailig, V. Babaev, A. Bogdanov and D. Beilin, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1075-1081.

Microtasking, Macrotasking, and Autotasking for Structur-al Optimization, A. Saleh and H. Adeli, AS Apr. 94,

p156-174

Nonlinear Analysis of Structural Frameworks Using Supercomputing Techniques, Christopher M. Foley and Sriramulu Vinnakota, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2058-2065.

Optimization of Space Trusses on Vector Multiprocessor, H. Adeli and H.-L. Hsu, AS Jan. 94, p120-126.

Parallel Algorithms for Integrated Structural/Control Optimization, A. Saleh and H. Adeli, AS July 94, p297-314. Parallel SDP for Multi-Reservoir Management, Elizabeth

A. Eschenbach, Christine A. Shoemaker and Hugh M. Caffey, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p818-821.

Timing Analysis of a Multiprocessor Architecture for Active Control, John W. Baugh, Jr. and Wael M. Elseaidy, (Analysis and Computation, Franklin Y. Cheng, ed.,

1994), p203-212.

Breakwater Armor Damage due to Wave Groups, Josep R. Medina, Robert T. Hudspeth and Claudio Fassardi, WW Mar./Apr. 94, p179-198.

Calibration of Poorly Identifiable Systems: Application to Activated Sludge Model, Marcos von Sperling, EE May/June 94, p625-644.

Confined Aquifer Parameters from a Pump Test Near an Impermeable Boundary, Stephen J. Burges, HY July 93, p838-845.

Determining Optimal Parameter Dimensions for Water Distribution Network Models, Keshaw N. Mallick, Kevin E. Lansey and Kevin S. Tickle, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p758-761.

Drawdowns for Leaky-Aquifer Flow with Storage in Fi-nite-Width Sink, Louis H. Motz, IR July/Aug. 94, p820-

Formulation of MIT-E3 Constitutive Model for Overconsolidated Clays, Andrew J. Whittle and Michael J. Kavvadas, GT Jan. 94, p173-198.

Identification and Uncertainty Estimation of Structural Parameters, C. G. Koh and L. M. See, EM June 94, p1219-

Methodology for Optimum Sensor Locations for Parameter Identification in Dynamic Systems, Firdaus E. Udwadia, EM Feb. 94, p368-390.

Non-steady-Flow Type Curves for Strip Aquifers with Constant Drawdown, Halil Onder, IR July/Aug. 94, p732-741.

Nonlinear Regression Applied to Hydrologic Data, Alexander C. Demetracopoulos, IR May/June 94, p652-659.

Parameter Estimation in Water-Distribution Systems by Least Squares, R. S. N. Datta and K. Sridharan, WR July/Aug. 94, p405-422

Parameter Estimation of Structures from Static Response II: Numerical Simulation Studies, M. R. Banan, M. R. Banan and K. D. Hielmstad, ST Nov. 94, p3259-3283.

Parameter Estimation of Structures from Static Response. I: Computational Aspects, M. R. Banan, M. R. Banan and K. D. Hjelmstad, ST Nov. 94, p3243-3258.

A Parameter Network and Model Pyramid for Managing Technical Information Flow, Scott Sinnock and Hollister A. Hartman, (High Level Radioactive Waste Manage-ment, High Level Radioactive Waste Program Committee, 1994), p306-314.

Parametric Evaluation of Cross-Flow Turbine Performance, V. R. Desai and N. M. Aziz, EY Apr. 94, p17-34.

Parametric Study on Collapse Loads of Skew Composite Bridges, Alaa Helba and John B. Kennedy, ST May 94, p1415-1433.

Performance Parameters for Pseudodynamic Tests, Chris Thewalt and Mauricio Roman, ST Sept. 94, p2768-2781. Simple Method for Identification of Border Infiltration and Roughness Characteristics, John D. Valiantzas, IR Mar./

Apr. 94, p233-249. Structural Damage Identification from Dynamic-Test Data, Juan R. Casas and Angel C. Aparicio, ST Aug. 94,

Unsaturated Flow Modeling—Exact Solution to Approximate Problem? Lakshmi N. Reddi and Sampath K. R. Danda, WR Mar./Apr. 94, p186-198.

Parking facilities

Optimal Supply of Parking at Airports, Massoud Javid and Prianka N. Seneviratne, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p174-182.

Parks

Bender Park Development Milwaukee County, Wisconsin, Rob Montgomery, Barry Murray and Paul Hathaway, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p460-469.

Current Trends in Waterpark Development, Terry R. Barn-hart, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p434-438.

The Day User, Marcus D. Hodges, (Marinas, Parks and

Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p506-513. Design and Technological Opportunities at Waterparks: The Hyland Hills' Water World Experience, Terry R. Barnhart, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p83-92.

Financing Construction and Operation Costs for Parks and Recreation Facilities, Richard Milbrodt, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p360-369.
Framework and Status of the ASCE Parks & Recreation Planning Child Marshall Flug.

Planning Guide, Marshall Flug, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p187-195.

Fraser Lands Riverfront Park Shoreline Edge Treatments, Stanley R. Cowdell and Harold C. Westerman, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p114-123.

Horticultural, Botanical & Environmental Resources, Di-

ane S. Lindsley, (), p534-535.

Linking Linear Greenways To Communities, Brian R.

Kliesmet, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p514-519.

Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994, 0-7844-0028-8, 620pp.

Master Planning - "Fact or Fiction", Marcus D. Hodges (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p77-82.

Milwaukee County Parks' Brown Deer Golf Course Lands P. G. A. Tour Event: A Gem of a Golf Course is Polished to a New Brilliance, Steve Bailey, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p536-543.

Multiple Use Pier Facilities in Parks, Jim Posda and Jon Guerry Taylor, (Marinas, Parks and Recreation Devel-opments, Marshall Flug, ed. and Fred A. Klancnik, ed.,

1994), p414-423.

Restoration of Lakes and Canals in an Urban Park - Belle Isle, Michigan, Catherine Riseng, Douglas Denison and Bernard Fekete, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p261-270.

Two Case Studies of Marine Parks & Marinas as Economic and Tourism Activity Stimulators in Brazil, Claudio Brasil do Amaral and John C. Corrough, (), p565-576.

Parthum, Charles A.

Charles A. Parthum Is 1994 Nominee for ASCE President-Elect, NE July 94, p3.

Foundation Set Up to Aid ASCE's Relocation to Washington Area; Deane Named Its President, NE Sept. 94, p1.

Partially saturated soils

Mitigation Measures for Small Structures on Collapsible Alluvial Soils, Kyle M. Rollins and G. Wayne Rogers, GT Sept. 94, p1533-1553.

Particle distribution

Pilot-Scale Demonstration of Sediment Washing, Jim E. Galloway and Frank L. Snitz, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p981-990.

Routing Debris Flows with Particle Segregation, Tamotsu Takahashi, Hajime Nakagawa, Tatsuo Harada and Yousuke Yamashiki, HY Nov. 92, p1490-1507.

Particle full velocity

Optical Methods for Sediment-Laden Flows, R. N. Parthasarathy and M. Muste, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p223-232.

Particle interactions

Compressibility for Sand Under One-Dimensional Loading Condition, Ching S. Chang, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1298-1311.

Micromechanics Modeling for Stress-Strain Behavior of Granular Soils. II: Evaluation, Ching S. Chang, Mohammed G. Kabir and Yang Chang, GT Dec. 92, p1975-

Particle motion

High-speed Video Analysis of Sediment-Turbulence Inter-action, Yarko Niño, Fabián López and Marcelo García, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p213-222

Monitoring of a dredging operation using innovative sedi-ment tracing techniques, Jonathan Marsh, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1360-1369.

On Measurements of Particle Spinning Motion, Hong Yuan Lee and In-Song Hsu, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p149-158.

Some Features of the Initial Stage of Sediment Motion in

Water Flows, Svetlana G. Beloshapkova, Alexander V. Beloshapkov and Sergey M. Antsyferov, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p910-923.

Assessing Effects for Disposal Sites off San Francisco, Peter Hamilton and Allan Y. Ota, (Estuarine and Coast-al Modeling III, Malcolm L. Spaulding, ed., Keith Bed-ford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p14-28.

Factors Affecting Degradation of Clay Masses, Paul A. Gilbert, (Dredging '94, E. Clark McNair, Jr., ed., 1994),

p449-457.

Microstructure, Image Analysis, and Fly Ash in Hardened Cement Paste, Sidney Diamond, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep and Concrete, Michael W. Studens, G., and Goldens, L. Sarkar, ed., 1994), p337.

One-Dimensional High-Pressure Compression of Granular Media, M. M. Hagerty, D. R. Hite, C. R. Ullrich and D. J. Hagerty, GT Jan. 93, p1-18.

Relation of Unit Gravel Discharge to Mean Velocity, Lilian Production of Conference on the Conference of Conference on the Conferenc

Posada-G and Carl F. Nordin, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1050-1054.

Size Characteristics of Debris Flow Deposition, Huilin Zhao and Yingyan Chen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p777.

Streambed Armoring, C. O. Chin, B. W. Melville and A. J. Raudkivi, HY Aug. 94, p899-918.

Particle size distribution

Biological Fluidized Beds Containing Widely Different Bioparticles, Kyoung S. Ro and Johannes B. Neethling, EE Nov./Dec. 94, p1416-1426.

Urban Runoff Based on Land Use and Particle Size, Linda D. Pechacek, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1242-1246.

Waste Minimization and Recycling by Microfiltration dur-ing Nitrocellulose Manufacturing, Lee Clapp, Jae K. Park and Byung J. Kim, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p98-105.

Water-Treatment-System Design for Turbidity Removal. I: Simulation, H. B. Dharmappa, S. Vigneswaran, J. Verink and O. Fujiwara, EE July/Aug. 94, p900-920.

Water-Treatment-System Design for Turbidity Removal. II: Optimization, H. B. Dharmappa, O. Fujiwara, J. Ver-ink and S. Vigneswaran, EE July/Aug. 94, p921-942.

Biological Fluidized Beds Containing Widely Different Bioparticles, Kyoung S. Ro and Johannes B. Neethling, EE Nov./Dec. 94, p1416-1426.

Coherent Structures in Compound Open-Channel Flows by Making Use of Particle-Tracking Visualization Technique, Iehisa Nezu, Hiroji Nakagawa and Ken-ichi Saeki, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p406-415.

Effects of Flocculation on Particle Transport, Wilbert Lick, C. Kirk Ziegler, James Lick and Aruna Joshi, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p172-186.

Effects of Particle Shape on Bedload Transport, M. Moore and P. Diplas, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p800-

Estimation of Dispersion Coefficients from Particle Tracks, David A. Chin, EE Jan./Feb. 94, p256-263.

Motion of Contact-Load Particles at High Shear Stress, Fidelia N. Nnadi and Kenneth C. Wilson, HY Dec. 92,

One-Dimensional High-Pressure Compression of Granular Media, M. M. Hagerty, D. R. Hite, C. R. Ullrich and D. J. Hagerty, GT Jan. 93, p1-18.

Particle Dynamics and Bed Level Adjustments in a Mountain Stream, Paul A. Carling, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p839-843.

Particulate media

The LEO Particulate Environment as Determined by LDEF, Thomas H. See, Michael E. Zolensky, Friedrich Hörz, Ronald P. Bernhard, Kimberly S. Leago, Jack L. Warren, Clyde A. Sapp, Tammy R. Foster and William H. Kinard, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p618-627.

Modeling of Interaction of Small Particulates in Earth

Orbit, Anthony F. Beverina and Christopher A. Dobosz, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p597-608.

Overview of Space Environmental Effects, Alan J. Watts, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p628-637.

Partnering

Community Partnering in Accelerated Construction Program, Leslie R. Henley, UP June 94, p74-86.

Dispute Resolution Giving Way to Dispute Prevention, CE Apr. 94, p20. Partnering for Success, Thomas R. Warne, 1994, 0-87262-

976-7, 90pp.

Partnering in Small Packages, Gary D. Bates, ME Nov./ Dec. 94, p22-23. Partnering Pardign, Herbert F, Harback, Donald L. Basham and Robert E, Buhts, ME Jan./Feb. 94, p23-27.

Partnering to Save Troubled Projects, Jim Brown, ME May/June 94, p22-25.

Partnering: A Team Building Approach to Quality Con-struction Management, Osama Abudayyeh, ME Nov./ Dec. 94, p26-29.

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We'd do it Again, Say Partnering Vets, ME July/Aug. 94, p11.

Partnerships

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Development of the Sheboygan Waterfront Sheboygan, Wisconsin, Robert Doyle, Fred A. Klancnik and Robert Petersen, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p552-561.

Partnering in Environmental Restoration: The Coastal America Model, William L. Klesch, (Water Policy and Management: Solving the Problems, Darrell G. Fontane,

ed. and Harry N. Tuvel, ed., 1994), p449-452.
The Role of Partnering and Public Involvement in the Lackawanna River Corridor Greenway Study, Robyn S. Colosimo, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p453-456.

Waterfront Renaissance Racine, Wisconsin, Thomas N. Wright, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p544-551.

Passenger terminals

Passenger-Terminal Simulation Model, José Reynaldo Setti and Bruce G. Hutchinson, TE July/Aug. 94, p517-535.

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The Channel Tunnel: Larger Than Life, and Late, Virginia Fairweather, CE May 94, p42-46.

Potential demand for passenger travel to orbit, Patrick Col-lins, Yoichi Iwasaki, Hideki Kanayama and Misuzu Oka-zaki, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p578-586.

Switzerland: Rail Access to Airports and the Fly-Luggage System, Eugene H. Jud, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p159-161.

Passive control

Active Versus Passive Radon Monitoring at the Yucca Mountain Site, Michael D. Griffin, (High Level Radioactive Waste Management, High Level Radioactive Waste

Program Committee, 1994), p1953-1958.

Implementation of Passive Energy Dissipation Systems in the United States, Andrew S. Whittaker and Ian D. Aiken, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1280-1285.

Methods to Control Wind-Induced Building Motions, Ahsan Kareem, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p654-659.

Seismic Upgrades Using Energy Dissipation Devices, David Bleiman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1274-1279.

Passive earth pressure

Passive Earth Pressures with Various Wall Movements, Yung-Show Fang, Tsang-Jiang Chen and Bin-Ferng Wu, GT Aug. 94, p1307-1323.

Reducing Wastewater Sludge Pathogens Using Heat Treatment, Mark Kennedy, Kondapalli Reddy and Lyle Johnson, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p281-288.

Pavement condition

Comparison of Traditional and Neural Classifiers for Pavement-Crack Detection, Mohamed S. Kaseko, Zhen-Ping Lo and Stephen G. Ritchie, TE July/Aug. 94, p552-569.

Effects of Routine Maintenance on Flexible Pavement Condition, Abdullah I. Al-Mansour, Kumares C. Sinha and Thomas Kuczek, TE Jan./Feb. 94, p65-73.

Image-Based Expert-System Approach to Distress Detection on CRC Pavement, Stephen Tsao, Nasser Kehtarnavaz, Paul Chan and Robert Lytton, TE Jan./Feb. 94, p52-64.

Life After Andrew on Florida's Turnpike, Massoud Moradi, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p558-566.

Mechanistic Model for Transition Probabilities, K. H. Chua and C. L. Monismith, TE Jan./Feb. 94, p144-159.

Modified Asphalt Binders - How Do They Compare? Randy C. Ahlrich and Gary L. Anderton, (Aviation Crossroads: Challenges in a Changing World, William

J. Sproule, ed., 1994), p64-74.

Pavement Treatment in Ohio Transportation System, Sakchai Prechaverakul, Fabian C. Hadipriono, Roger L. Green, Richard D. Boyle and John A. Ray, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1892-1899.

Probabilistic Behavior of Pavements, Kelvin C. P. Wang, John Zaniewski and George Way, TE May/June 94,

Simple Procedure for Identifying Pavement Distresses from Video Images, Koon Meng Chua and Ling Xu, TE May/June 94, p412-431.

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Cedergren, CE Sept. 94, p56-58.

Durability of Concrete Materials Under Pavement Joints, Stephen R. Munoz and Eddie Y. J. Chou, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1-7. Experience is Not Bettering Pavement Designs (ltr), CE6-94, CE June 94, p35-36.

Performance of Fuel-Resistant Sealers for Asphalt Concrete Pavements, James E. Shoenberger, MT Feb. 94, p137-149.

Statistical Evaluation of Truck Overloads, Jamshid Mohammadi and Nadir Shah, TE Sept./Oct. 92, p651-

Pavement deflections

Planning and Implementing a Management System for Utility Cuts in City Streets, Rajagopal S. Arudi, Prahad D. Pant, Andrew Bodocsi and Ahmet E. Aktan, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p764-771.

Pavement design

America's Pavements: World's Longest Bathtubs, Harry R. Cedergren, CE Sept. 94, p56-58. Aviation Crossroads: Challenges in a Changing

William J. Sproule, ed., 1994, 0-7844-0029-6, 220pp.

Dynamic Loading of Airfield Pavements Caused by Aircraft Operations on Rough Runways, Anthony G. Gerardi and Wayne G. Johnson, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p30-41.

Evaluation of Drainable Base Courses for Pavements, William P. Grogan, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p693-

Evaluation of Laboratory Limerock Bearing Ratio Test on Pavement Soils in Florida, W. Virgil Ping and Zhiliang Yu, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p223-230. Experience is Not Bettering Pavement Designs (ltr), CE6-

94, CE June 94, p35-36. Field Evaluation of Plate Bearing Load Test on Pavement Soils in Florida, W. Virgil Ping and Ling Ge, (Infrastructure: New Materials and Methods of Repair, Kim D.

Basham, ed., 1994), p231-238.

Implementation of Elastic Layered Theory for Design of Unbonded Overlays, Walter R. Barker, Jim W. Hall, Jr. and Carlos R. Gonzalez, (Aviation Crossroads: Chal-lenges in a Changing World, William J. Sproule, ed., 1994), p42-52.

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Nighttime Cement Concrete Pavement Replacement Seattle-Tacoma International Airport, Jo A. Lary and John Rothnie, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p92-101.

Proposed Uniform Scale for Stiffness of Unbound Pavement Materials for Pavement Design, Herbert F. Southgate and Kamyar C. Mahboub, TE Nov./Dec. 94, p940-952.

Quality Assurance and Quality Control for Pavement Management in Florida, Bruce T. Dietrich and W. Virgil Ping, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1034-1041.
Seasonal Variation of Resilient Modulus of Subgrade Soils, Myung S. Jin, K. Wayne Lee and William D. Kovacs, TE

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Structural Analysis of Pavements: State-of-the-Art, Yu T. Chou, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p958-963

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Temperature Effects on Rigid Pavements, I. E. Harik. P.

Jianping, H. Southgate and D. Allen, TE Jan./Feb. 94, p127-143.

Unbound Drainable Base Courses: Permeability Versus Unsurfaced Stability, Reed B. Freeman and Gary L. Anderton, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p685-692.

Pavement deterioration
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Mathematics of Concrete Scaling, Dan F. Adkins, Gary P. Merkley and Gertrudys Brito, MT May 93, p280-288. Probabilistic Behavior of Pavements, Kelvin C. P. Wang, John Zaniewski and George Way, TE May/June 94, p358-375.

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Rigid Pavement Evaluation with Seismic Pavement Analyzer, S. Nazarian, M. Baker and K. Crain, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p508-515.

Road-Maintenance Planning Using Genetic Algorithms. II: Analysis, T. F. Fwa, C. Y. Tan and W. T. Chan, TE Sept./Oct. 94, p710-722.

Simple Procedure for Identifying Pavement Distresses from Video Images, Koon Meng Chua and Ling Xu, TE May/June 94, p412-431.

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Pavement management systems

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Global Network Optimization for Pavement Management, Kelvin C. P. Wang and John Zaniewski, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p474-

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Integrating Computer Application for Pavement Management: A Case Study, Dimitri A. Grivas, B. Cameron Schultz and Richard Garrabrant, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1951-

New Crack-Imaging Procedure Using Spatial Autocorrela-tion Function, H. Lee and H. Oshima, TE Mar./Apr. 94,

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Pavement Treatment in Ohio Transportation System, Sakchai Prechaverakul, Fabian C. Hadipriono, Roger L. Green, Richard D. Boyle and John A. Ray, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1892-1899

Planning and Implementing a Management System for Utility Cuts in City Streets, Rajagopal S. Arudi, Prahlad D. Pant, Andrew Bodocsi and Ahmet E. Aktan, (Infra-D. Basham, ed., 1994), p764-771.

Probabilistic Behavior of Pavements, Kelvin C. P. Wang,

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Quality Assurance and Quality Control for Pavement Management in Florida, Bruce T. Dietrich and W. Virgil Ping, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1034-1041.

Reliability Assessment of Continuously Reinforced Concrete Pavements, Angela J. Weissmann, B. Frank McCullough and W. Ronald Hudson, TE Mar./Apr. 94,

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Uncertain Reasoning in a Pavement Management System, B. N. O. Attoh-Okine, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p326-332.

Pavement markings

Markings, Hashem R. Al-Masaeid and Kumares C. Sinha, TE Sept./Oct. 94, p723-736.

Pavement overlays

Analytical and Experimental Analyses of Fatigue Crack Propagation in Asphalt Concrete Overlays, R. Ballarini, G. C. Ferrante and J. L. Figueroa, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994),

Asphalt-Rubber Hot Mix in Road Rehabilitation, Kirk L. Beaty, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p319-326.

Implementation of Elastic Layered Theory for Design of Unbonded Overlays, Walter R. Barker, Jim W. Hall, Jr. and Carlos R. Gonzalez, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p42-52

Interface Shear Stress in Overlaid Concrete Pavements, C. M. Lau, T. F. Fwa and P. Paramasivam, TE Mar./Apr.

94, p163-177.

Pavement Renovation with HPI Electrochemical Method, Roland S. Jary, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p643-653.

Rigid Pavement Rehabilitation at the San Marcos Municipal Airport, San Marcos, Texas, Franklin Hines and David Pickett, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p531-538.

Pavement recycling

Advancement of Material Handling Technologies for In-Place Asphalt Pavement Recycling, Sotiris A. Pagdadis and Ilan Ishai, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p365-373.

Recycling Portland Cement Concrete Pavement at the Contractor's Option, Richard R. Reusser, (Aviation Crossroads: Challenges in a Changing World, William

J. Sproule, ed., 1994), p86-91.

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An Artificial Neural Network Approach to Pavement Maintenance Decision Support System, Abdullah M. Alsugair and Essam Sharaf, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p942-949.

Assessment of Distress Models for Prediction of Pavement Service Life, Dar-Hao Chen, Musharraf Zaman and Joakim G. Laguros, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1073-1080

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Dynamic Linear Back Calculation of Pavement Material Parameters, Jacob Uzan, TE Jan./Feb. 94, p109-126.

Dynamic Pavement-Strain Histories from Moving Traffic Load, Zia Zafir, Rai Siddharthan and Peter E. Sebaaly, TE Sept./Oct. 94, p821-842.

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Impact Echo in the Thick of Pavement Construction, CE Dec. 94, p19,21.

Impact of Nuclear Waste Traffic on Highways, Peter E. ebaaly, Raj Siddharthan and Jon A. Epps, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1255-1262.

Mechanistic Model for Transition Probabilities, K. H. Chua and C. L. Monismith, TE Jan./Feb. 94, p144-159.

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Microsurfacing Urban Pavements, David K. Hein, John J. Emery and Romualdo D'Ippolito, CE May 94, p55-57.

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PCR

Laboratory and Field Demonstrations of Sediment Treatment Technologies by the USEPA's Assessment and Remediation of Contaminated Sediments (ARCS) Program, Stephen Garbaciak, Jr., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p567-578.

New Bedford Harbor, Massachusetts Dredging/Disposal of PCB Contaminated Sediments, Mark J. Otis, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p579-587.

Pilot-Scale Demonstration of Sediment Washing, Jim E. Galloway and Frank L. Snitz, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p981-990.

Risk Variability from Uniform Soil Remediation Goals for PCBs, Paula A. Labieniec, David A. Dzombak and Robert L. Siegrist, EE May/June 94, p495-512.

Peak floods

1993 Mississippi Record Stages and Levee Failures, Sally McConkey, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p603-607.

Factors Affecting Accuracy of Slope-Area Discharge De-termination of the September 1992 Flood in Raven Fork, Western North Carolina, W. Harold Eddins and Thomas J. Zembrzuski, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p645-649.

Floodflow Effects on Riparian Vegetation in Arizona, J. V. Phillips and H. W. Hjalmarson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p707-711.

Natural and Dam Break Flood Routing in Mountain Riv-ers, Enan F. Jayyousi, David S. Bowles and Roland W. Jeppson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p371-

Peak flow

Effect of Nonstandard Rainfall Distributions on Stormwater Management Detention Basins, Robert G. Traver and Ronald A. Chadderton, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p612-615.

Estimation of Peak Flow and Runoff Volume with Response Surface Method, Shie-Yui Liong and Yaacob

Ibrahim, WR Mar./Apr. 94, p161-175.

Historical Trends in Flood Discharges on the Upper Mississippi River, H. Vernon Knapp, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p618-622.

Joint Probability Distribution of Rainfall Intensity and Duration, G. V. Loganathan and Glenda Patron, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p193-196.

The Miller City Levee Break and Incipient Meander Cutoff, K. A. Oberg and R. B. Jacobson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p623-627.

Probable Maximum Flood Estimation for New and Exist-ing Dams, Anand Prakash, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p361-365.

Problems with Indirect Determinations of Peak Streamflows in Steep, Desert Stream Channels, Patrick A. Glancy and Rhea P. Williams, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p635-639.

Seasonal Distributions of Peak Flows From Small Agricultural Watersheds, James V. Bonta and A. Ramachandra Rao, IR Mar./Apr. 94, p422-439.

Peak runoff

Peak Runoff Prediction for Small Rural Watersheds, James C. Y. Guo, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p604-607.

Peak Load Determination in Linear Fictitious Crack Model, Yuan N. Li and Robert Y. Liang, EM Feb. 94, p232-249.

Peaking capacities

Simulating Hourly Hydropower Operations for the Assessment of Environmental and Economic Impact, David A. Harpman, A. Spreck Rosekrans and Ronald E. Moulton, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p553-556

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ASCE Elevates 13 of Its Own to Honorary Membership, NE May 94, p3.

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C_o/C_c Concept Applied to Compression of Peat, Patrick J. Fox. Tuncer B. Edil and Li-Tus Lan, GT Aug. 92,

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Field Test of Thermal Precompression, Tuncer B. Edil and Patrick J. Fox, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1274-1286.

Heavy Metal Removal Using Peat/Wetland Treatment, Suzanne Murawski, (Critical Issues in Water and Waste-water Treatment, Joseph N. Ryan, ed. and Mare Ed-wards, ed., 1994), p408-414.

Settlement of Peats and Organic Soils, Tuncer B. Edil and Evert J. den Haan, (Vertical and Horizontal Deforma-tions of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1543-1572.

U.S. Experience with Dynamic Compaction of Collapsible Soils, Kyle M. Rollins and Ji-Hyoung Kim, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p26-43.

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Strategies for Increasing Bicycle and Pedestrian Safety and Use, Brian L. Bowman, Robert L. Vecellio and David W. Haynes, UP Sept. 94, p105-114.

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A Computerized Methodology for Conducting Pedestrian Gap Studies, John Tipaldo, (Computing in Civil Engi-neering, Khalil Khozeimeh, ed., 1994), p2066-2072.

GIS Modeling of Neo-Traditional Neighborhood Development, John R. Stone, Thomas H. Wittmann and Jonathan L. Boone, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1131-1138.

ISTEA Enhances Transportation, Douglas L. Tober, CE Oct. 94, p64-66.

Modal Identification of Cable-Stayed Pedestrian Bridge, Mack G. Gardner-Morse and Dryver R. Huston, ST Nov. 93, p3384-3404.

Strategies for Increasing Bicycle and Pedestrian Safety and Use, Brian L. Bowman, Robert L. Vecellio and David W. Haynes, UP Sept. 94, p105-114.

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Penetration

Penetration Fracture of Ice Plate: 2D Analysis and Size Effect, Yuan-Neng Li and Zdeněk P. Bažant, EM July 94, p1481-1498.

Penetration Fracture of Sea Ice Plate: Simplified Analysis and Size Effect, Zdeněk P. Bažant and Yuan-Neng Li, EM June 94, p1304-1321.

Penetration resistance

In-Situ Measurements of Dynamic Soil Properties and Liq-uefaction Resistances of Gravelly Soils at Keenleyside Dam, Ken K. Y. Lum and Li Yan, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p221-240.

Penetration Resistance Value along Compaction Curves, Alain G. Faure and José D. Viana Da Mata, GT Jan. 94,

Penetration tests

Becker Test Results from Gravel Liquefaction Sites, Leslie F. Harder, Jr., (Ground Failures Under Seismic Condi-tions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p201-220.

Comparison of Settlement Predictions for Single Piles in Sand Based on Penetration Test Results, James B. Nevels and Donald R. Snethen, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1028-1038.

Prediction of Settlement of Footings on Sand, G. Mesri and M. Shahien, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p188-191. Settlement of Footings on Granular Materials: Low and Large Strain Parameters, F. Ahtchi-Ali and J. C. San-tamarina, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1287-1297.

T-Bar Penetration Testing in Soft Clay, D. P. Stewart and M. F. Randolph, GT Dec. 94, p2230-2235.

Affordable Housing Solutions Offered in Pittsburg, CE May 94, pl 1.

Investments in the Future, James Denning, CE July 94,

p40-43 Putting a Historic Train Shed Back on Track, CE July 94, p22-23.

Three Mile Island Robot Returns to Work, CE Apr. 94, p24-25.

Penstocks

Laboratory and Field Evaluation of Acoustic Velocity Meters, Tracy Vermeyen, (Fundamentals and Advance-ments in Hydraulic Measurements and Experimentation,

Clifford A. Pugh, ed., 1994), p43-52.

Mapping 2-D and 3-D Velocity Components in Circular Conduits Using an Electromagnetic Current Meter and a 5-Hole Pilot Probe, Joseph J. Orlins and Lawrence J. Swenson, (Fundamentals and Advancements in Hydrau-lic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p53-61.

Percolation

A Borehole Instrumentation Program for Characterization of Unsaturated-Zone Percolation, Jack Kume and Joseph P. Rousseau, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2076-2083.

Modified Oedometer for Arid, Saline Soils, Omar Saeed Baghabra Al-Amoudi and Sahel N. Abduljauwad, GT

Oct. 94, p1892-1897.

Some Features of the Initial Stage of Sediment Motion in Water Flows, Svetlana G. Beloshapkova, Alexander V. Water Flows, Octobal O. Beloshapkova, Alexander V. Beloshapkov and Sergey M. Antsyferov, (*Coastal Dynamics '94*, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p910-923.

Stress-Path Dependent Shear Strength of Sand, J. Feda, GT

June 94, p958-974.

A Study of Alkalinity Leaching and Residual Strength of Oduy of Aikatinity Leaching and Residual Strength of Alkaline Stabilized Sludge, Andrew P. Kruzic and Thomas M. Petry, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p129-136.

Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994, 0-7844-0034-2,

621pp.

Application of Heavy Duty Roadheaders for Underground Development of the Yucca Mountain Exploratory Study Facility, Jamal Rostami, Levent Ozdemir and David M. Neil, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p395-402.

The Application of Thermal Rock Bolts in the Thermal Design of a Nuclear Waste Repository, George Danko, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p890-898

ASDSO to Archive Data on U.S. Dams, CE Oct. 94, p25.

Breakwater Design and Construction Harbor Centre Marina Sheboygan, Wisconsin, Tom Holtan, Dave Anglin, Dave Sanders and Larry Ryan, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p292-299.

Causes of Roof Covering Damage and Failure Modes: Insights Provided by Hurricane Andrew, Thomas Lee Signits Provided by Financian Andrew, Financia Ecc Smith, (Hurricanes of 1992: Lessons Learned and Impli-cations for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p303-312.

Conceptual Design and Characteristics of A Dual-Arm Cam-Lock Manipulator, Ali Meghdari, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p140-148.

DBP Control in Drinking Water: Cost and Performance, Robert M. Clark, Jeffrey Q. Adams and Benjamin W. Lykins, Jr., EE July/Aug. 94, p759-782.

Design Techniques for Rectangular Lunar Modules, Mark E. Schroeder, Philip J. Richter and Jim Day, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p176-

Dimensions and Management of Facility Performance, James C. Porter, El Jan. 94, p1-7.

Durable Concrete, Bryant Mather, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p52-63.

Effects of Dust and Thermal Cycling on Telescope Mirror Performance, Koon Meng Chua, R. Eric Pease and Stewart W. Johnson, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley

Lokaj, ed., 1994), p916-932.

Effects of Force Reflection on Telerobotic Performance, Raymond Dick, Terry Faddis and Bill Barr, (Robotics for Challenging Environments, Laura A. Demsetz, ed.

and Paul R. Klarer, ed., 1994), p259-268.

Effects of Hurricanes Andrew and Iniki on Lifelines, Masoud M. Zadeh, Tom Larsen, Charles Scawthorn, Craig Van Anne and Tom K. Chan, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p223-232

Empirical Performance Comparison for Symbolic and Subsymbolic Learning Systems, Tomasz Arciszewski, Adam Borkowski, Tomasz Dybala, Janusz Racz and Piotr Wojan, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p1075-1082.

The Evolution of Breakwater Design, Billy L. Edge, Or-ville T. Magoon and William F. Baird, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p1024-1039.

Extended Topology in Building Design Systems, Godfried Augenbroe and Wouter Rombouts, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1196-

1203.

Fires Deemed to Have Tested Structural Performance, Paul R. De Cicco, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p990-995.

Flexible Extracation of Practical Knowledge from Bridge Databases, Yoram Reich, Steven J. Fenves and Eswaran Subrahmanian, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1014-1021.

Forecasting Labor Productivity Using Factor Model, H. Randolph Thomas and Ahmet S. Sakarcan, CO Mar. 94,

p228-239.

A Goal Driven Approach to Discrete Event Simulation, Abdullah M. Alsugair and David Y. Chang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p515-522.

Identifying Significant Uncertainties in Thermally Depend-ent Processes for Repository Performance Analysis, James D. Gansemer and Alan Lamont, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2197-2206.

Improved Thermal Source Term Generation Capability for Use in Performance Assessment and System Studies, John King and Carol Rhodes, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p627-633.

Improving the Performance of Architectrual Glazing in Hurricanes, Joseph E. Minor and Richard A. Behr, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p476-485.

Late Glacial Climate Estimates for Southern Nevada the Ostrocode Fossil Record, Richard M. Forester and Alison J. Smith, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2553-2561.

Lessons Learned From Missed Predictions, John A. Focht, Jr., GT Oct. 94, p1651-1683.

Managing Performance of Engineers, Tom D. McFarland, ME Sept./Oct. 94, p28-33.

Models for Source Term, Flow, Transport and Dose As-sessment in NRC's Iterative Performance Assessment, Phase 2, Timothy McCartin, Richard Codell, Robert Neel, William Ford, Rex Wescott, John Bradbury, Budhi Sagar and John Walton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p1469-1479.

Multi-Barrier Waste Package Fabrication and Closure Development, Wayne E. Wallin, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p955-962.

Multi-Objective Optimization of Construction Schedules, Tadeusz Kasprowicz, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p185-190.

A New Automated System for Decision Support in the Construction Industry, M. J. Riley and C. J. Pickering, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p523-530.

Performance and Analysis of Frames With "URM" Infills, Khalid M. Mosalam, Peter Gergely and Richard N. White, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p57-66.

Performance Assessment of the Copper/Steel Canister, Patrik Sellin, Torsten Eng and Lars Werme, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1020-1029.

A Performance Goal-Based Seismic Design Philosophy for Waste Repository Facilities, Quazi A. Hossain, (High Level Radioactive Waste Management, High Level Ra-dioactive Waste Program Committee, 1994), p2266-2271.

Performance of Commercial Masonry Structures in Hurri-cane Andrew, Geoffrey W. Blaney, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994),

p456-464.

Performance of Metal-Plate-Connected Wood Truss Roof Systems During Hurricane Andrew, Ramon M. Riba, Michael H. Triche and Charles Hoover, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994).

Performance of New York's Long-span Bridges, Satinder P. S. Puri, Richard J. Kratky and Maria Grazia Bruschi, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p1022-1031.

Performance of Offshore Platforms in Hurricane Andrew, Ahsan Kareem and Charles E. Smith, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994),

Performance of Submerged Vanes for Control of Sediment in an Irrigation Canal, Steven W. Tanis, (Hydraulic En-gineering '94, George V. Cotroneo, ed. and Ralph R.

Rumer, ed., 1994), p1181-1185.

Performance of Traffic Signals and Signs in Hurricane Andrew, Frances K. Ashley, Ronald A. Cook and Marc I. Hoit, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p415-423.

Plans for Managing High Level Waste at the Savannah River Site, N. A. Sheikh and S. R. Salaymeh, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1037-

Prediction of Deep-Bed-Filter Performance Using Recursive Algorithms, C. S. P. Ojha and N. J. D. Graham, EE

July/Aug. 94, p961-971.

Rationale for Determining Spent Fuel Acquisitions for Repository Testing, Steven C. Marschman, Robert E. Einziger and Ray B. Stout, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1074-1079.

Recent Developments in Physical Testing of Aggregates to Ensure Durable Concrete, C. A. Rogers and S. A. Senior, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994),

Save That Employee Rather Than Fire, Anne Glad, ME July/Aug. 94, p16-18.

Scenario Development for the Waste Isolation Pilot Plant: Building Confidnece in the Assessment, Daniel A. Galson and Peter N. Swift, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1350-1357

SQP Methods for Inverse Airfoil Design, Carlos Orozco and Omar Ghattas, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p297-306.

Subrepository Scale Hydrothermal Analysis in Support of Total System Performance Assessment at Yucca Mountain, Srikanta Mishra, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1202-1213.

Thermal Performance of a Depleted Uranium Shielded Storage, Transportation, and Disposal Package, S. D. Wix and H. R. Yoshimura, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p877-881.

Three-dimensional Modeling for Improving Construction Process Performance, Amarjit Singh, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1156-1163.

Verification of the AECL Total System Performance Modells, Keith Kersch and Steve Oliver, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p2437-2441.

Performance characteristics

Control of Aging Processes in Wastepaper Fiber Rein-forced Cement, Parviz Soroushain, Jong-Pil Won and Jer-Wen Hsu, (Infrastructure: New Materials and Meth-ods of Repair, Kim D. Basham, ed., 1994), p539-544.

Effects of Crumb Rubber Type and Content on Performance Related Properties of Asphalt Binders, H. U. Bahia and R. Davies, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p449-

Flexural Behavior of Simcon, David J. Akers and Ziad Bayasi, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p375-379.

High-Performance Concrete Incorporating Large Volumes of ASTM Class F Fly Ash, A. Bilodeau and V. M. Malhotra, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994),

Mineral Admixtures in Cements for General Use and Special Purposes, Harold Roper, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L.

Sarkar, ed., 1994), p236-242.

Rheological Evaluation of Engineered Asphalt Binders, H. U. Bahia and N. I. Kamel, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994),

Selected Properties of High Performance Concrete, Erik J. Sellevold, Harald Justnes, Sverre Smeplass and Einar Aasved Hansen, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed.,

1994), p562-609.

Use of Low Density Polyethylene to Modify Asphalt Mixtures, Fouad M. Bayomy and Glenn D. Carraux, (Infra-structure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p303-310.

Performance evaluation

Alternative Approaches to Reliability Modeling of a Multi-ple Engineered Barrier System, Malwane M. A. Ananda and Ashok K. Singh, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1030-1036.

Analyses of Releases Due to Drilling at the Potential Yucca Mountain Repository, R. W. Barnard, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1292-1297.

Applications of Field Testing to Bridge Evaluation, Fred Moses, Jean Paul Lebet and Rolf Bez, ST June 94, p1745-1762.

ASDSO to Archive Data on U.S. Dams, CE Oct. 94, p25. Asphalt Applications for Railroad Maintenance and Con-struction, Jerry G. Rose, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p617-626.

Asphalt Rubber a Federal Perspective, Joseph Massucco, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p467-474.

The Assessment of Future Human Actions at Radioactive Waste Disposal Sites: An International Perspective, D. R. Anderson, D. A. Galson and E. S. Patera, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1286-1291.

Assessment of Rock Bolt Systems for Underground Waste Storage, Wesley T. Leedy and Robert J. Watters, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p691-695. Behavior of Cast-Iron Spillway Gate Wheels, Dimos Po-

lyzois and Walter J. Muzyczka, MT Nov. 94, p495-512. Case Study of Modified Bituminous Mixtures: Somerset, Kentucky, Amy L. Simpson and Kamyar C. Mahboub,

(Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p88-96. Clarifier Enhancements Yield Excellent Performance, Cindy L. Wallis-Lage and David B. Hunt, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p194-201.

Consequential Fire Loads on Structures, Donald O. Dusen-

berry, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p996-1001. Core Message from PNC/H-3 and Key Issues for the Next Milestone, Sumio Masuda, Katsuhiko Ishiguro, Mikazu Yui and Tadashi Mano, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1501-1507.

Critical Analysis of Time and Cost of Management and Traditional Contracts, Shamil G. Naoum, CO Dec. 94,

p687-705.

Design, Construction and Performance of a Soil Nailed Wall in Puerto Rico, Suang S. Cheng and Lawrence A. Hansen, (Serviceability of Earth Retaining Structures,

Richard J. Finno, ed., 1994), p1-16.

Developing Economic Performance Information for Water Management Projects in North China, Ari M. Michelsen and Jona Bargur, (Water Policy and Management: Solv ing the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p641-644.

EEO, ADA and Hiring, Mark Disney, ME May/June 94,

p18-21. Effect of Restriction of Vision on Driving Performance, Rod Troutbeck and Joanne M. Wood, TE Sept./Oct. 94,

The Efficiency of Source Terms in Performance Assess-ments for Salt Repositories, Dieter Buhmann, Jürgen Brenner and Richard Storck, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p501-507.

Evaluating Activated Sludge Secondary Clarifier Performance: A Protocol, E. J. Wahlberg, M. Augustus, D. T. Chapman, C. Chen, J. K. Esler, T. M. Keinath, D. S. Parker, R. J. Tekippe and T. E. Wilson, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p209-216.

Evaluation of Drainable Base Courses for Pavements, William P. Grogan, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p693-

Even with Innovative Materials, the Basics Still Matter, James Warner, (Infrastructure: New Materials Methods of Repair, Kim D. Basham, ed., 1994), p72-79.

Filtration and Backwashing Performance of Biologically-Active Filters, A. Amirtharajah, Rasheed Ahmad, A. Al-Shawwa and P. M. Huck, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p178-185.

A Formal Expert Judgment Procedure for Performance Assessments of the Waste Isolation Pilot Plant, Kathleen M. Trauth, Robert V. Guzowski and Stephen C. Hora, (High Level Radioactive Waste Management, High Level Ra-dioactive Waste Program Committee, 1994), p1745-1752.

Further Development of a Source Term Model for a Repository in Unsaturated Tuff, Richard Codell and Richard Weller, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p477-484.

Homogeneity Tests Based Upon Gumbel Distribution, Heinz D. Fill and Jery R. Stedinger, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p790-793.

How Do Geosynthetics Improve Pavement's Performance, Imad L. Al-Qadi, Thomas L. Brandon, Timothy E. Smith and Bruce A. Lacina, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994),

p606-616.

Identifying Causes of Failure in Providing Geotechnical and Environmental Consulting Services, Douglas C. Moorhouse and Richard A. Millet, ME May/June 94,

Industrial Facility Quality Perspectives in Owner Organiza-tions, Kelly Jean Fergusson and Paul Teicholz, CF May

94, p89-109.

Influence of Flexible Mat on Settlements of Marine Clay, A. M. Deshmukh and V. T. Ganpule, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994),

IPA Phase 2 and NRC's HLWM Regulatory Program, Norman A. Eisenberg, Rex G. Wescott, Margaret V. Feder-line, Mel Silberberg and Budhi Sagar, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1451-1460.

IPA Phase 2 Sensitivity and Uncertainty Analysis, Virginia Colten-Bradley, Richard Codell and M. Rose Byrne, (High Level Radioactive Waste Management, Level Radioactive Waste Program Committee, 1994), p1480-1491

IPA Phase 2 Total System code and Scenario Analysis, James R. Park, Robert G. Baca, Norman A. Eisenberg, Ronald W. Janetzke and Budhi Sagar, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1461-1468.

Level-of-Service Analysis of Toll Plazas on Freeway Main Lines, Feng-Bor Lin and Cheng-Wei Su, TE Mar./Apr.

94, p246-263.

Limitations on Scientific Prediction and How They Could Affect Repository Licensing, Richard A. Van Konynenburg, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p285-291.

Long Term Performance of Fiber Reinforced Cements and Concretes, Arnon Bentur, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L.

Sarkar, ed., 1994), p223-234.

Long Term Performance of Raft and Footing Foundations Above Clayey Silt, A. O. Landva, A. J. Valsangkar and Z. Wroblewicz, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p860-874.

A Look at the Superpave Level 1 Mix Design Process, R. Michael Anderson and Robert B. McGennis, (Infrastructure: New Materials and Methods of Repair, Kim D.

Basham, ed., 1994), p880-887.

A Method for Rock Dredging Performance Forecasting Jorge E. Abramian and R. Bruce Taylor, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p229-238.

Montana Experience with Polymer Modified Asphalt, Murari Man Pradhan and Joseph D. Armijo, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p311-318.

Natural Analogues and Performance Assessment, Paul L. Cloke, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p1329-1336. New Guidelines for Southern Pine Uses in Coastal Marine Construction, Jon Guerry Taylor, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p480-488.

Optimizing Secondary Clarifier Performance: A Presentation Outline, John K. Esler, (Critical Issues in Water and Marshall Fluggers, Treatment Levels N. Pages, ed. and Marshall Fluggers, and Marshall Fluggers,

Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p202-208.

The Performance and Behaviour of Biological Filter Walls as Affected by Cyclical Temperature Changes, George L. England, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p57-76.

Performance Assessment Model of a Single Waste Package, William J. O'Connell, Tzou-Shin Ueng and Lynn C. Lewis, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1188-1194.

Performance Assessment of the INEL Spent Fuel and HLW in Two Hypothetical Repositories, Larry L. Taylor, Robert P. Rechard, Henry H. Loo, Ronald D. Klinger and Leonard F. Ermold, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p1508-1513.

Performance Evaluation of Ceramic Filter Candles, Malay Chaudhuri, Sanjeev R. Verma and Anirban Gupta, EE Nov./Dec. 94, p1646-1651.

Performance Evaluation of Constructed Wetland Treatment System, L. B. Sumrall, R. Y. Surampalli, S. K. Banerji and D. M. Sievers, CR June 94, p35-46.

Performance Evaluation of Crumb-Rubber Modified Asphalt Interlayers, Olga Pendleton and Cindy Estakhri, (Infrastructure: New Materials and Methods of Repair,

Kim D. Basham, ed., 1994), p441-448.

Performance of a Steel Tank Founded on a Marine Clay, H. Senapathy, J. R. Davie and L. W. Young, Jr., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p830-841.

Performance of Anisotropic Geosynthetic-Reinforced Co-hesive Soil Mass, Hoe I. Ling and Fumio Tatsuoka, GT

July 94, p1166-1184.

Performance of Slab-on-Grade Foundations on Expansive Soil, Robert W. Day, CF May 94, p129-138.

Performance of Three Large-Diameter Oil Tanks on Soft Clay, Mamdouh Hamza, John R. Davie and Michael R. Lewis, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p923-936.

Performance of Wick Drains Installed by Vibration, Richard P. Long, Leo F. Fontaine and Bruce Olmstead, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1193-1201.

Performance of Wood-Framed Structures in the January 17, 1994, Northridge Earthquake, David J. Akers, (Infrastructure: New Materials and Methods of Repair, Kim

D. Basham, ed., 1994), p662-668. Performance Parameters for Pseudodynamic Tests, Chris

Thewalt and Mauricio Roman, ST Sept. 94, p2768-2781. Performance Summary of the Tanque Verde Project-Geogrid Reinforced Soil Retaining Walls, James G. Col-lin, Donald G. Bright and Ryan R. Berg, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p43-56.

Personal Computer Model to Evaluate Performance of Construction Systems/Services, Dean T. Kashiwagi, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p502-506.

Pilot Test on Groundwater Organics Removal by Low-Pressure Membranes, Paul Fu, Hector Ruiz, Ken Thompson and Carl Spangenberg, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p336-343.

PWR Axial Burnup Profile Database, R. J. Cacciapouti, S. Van Volkinburg and L. A. Hassler, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p739-743.

Relationship of SHRP Binder Test, Frank Fee, (Infrastructure: New Materials and Methods of Repair, Kim D.

Basham, ed., 1994), p114-122.

- Results from the Kristallin-I Performance Assessment, Paul A. Smith, Piet Zuidema, Ian G. McKinley, Enzo Curti, Ryk A. Klos, Trevor Sumerling and Dan Galson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1648-1654.
- Robust EBS Design and Source-Term Analysis for the Par-tially Saturated Yucca Mountain Site, Mick Apted, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p485-490.

Scaling Behavior of Gas Permeability Measurements in Volcanic Tuffs, Vincent C. Tidwell, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p2500-2509.

Seismic Damage-Control Design of Gypsum-Roof Diaphragms, Sashi K. Kunnath, Mehrdad Mehrain and William E. Gates, ST Jan. 94, p120-138.

Serviceability of Earth Retaining Structures, Geotechnical Special Publication No. 42, Richard J. Finno, ed., 1994,

Special Publication (NO. 42, Kichard J. Pillio, Cu., 1974, 0-7844-0051-2, 1609 pc.
Settlement Evaluation for Cap Closure Performance, Edward M. Zamiskie, M. Golam Kabir and Andre Haddad, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p462-475.

Settlement of Compacted Fills Caused by Wetting, Iraj Noorany and Jeffrey V. Stanley, (Vertical and Horizon-tal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1516-

Site Characterisation and Performance Assessment in the Swiss Nuclear Waste Disposal Programme: Benefits from the Second NAGRA/USDOE Project Agreement, S. Vomvoris, P. Zuidema and P. Blümling, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2616-2623.
Site Characterization and Related Activities at the Potential

High-Level Radioactive Waste Repository Site at Yucca Mountain, Nevada, Carl P. Gertz, Paul L. Cloke, Robert M. Nelson, Jr. and Maxwell B. Blanchard, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2291-2296.

Site Characterization Plan Thermal Goals Reevaluation, Steven F. Saterlie and J. C. de la Garza, (High Level Radioactive Waste Management, High Level Radioactive

Waste Program Committee, 1994), p882-889. Sludge Hopper Design for Activated Sludge Clarifiers, O. E. Albertson, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p217-224.

Soil Nailing Saves Distressed Timber Wall, James Harmston and Gary W. Rhodes, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p130-

136.

Some Results from the Second Iteration of Total-System Performance Assessment for Yucca Mountain, Michael L. Wilson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1655-1662.

Stochastic Fluid Travel Times in Heterogeneous Porous Media, Wade E. Hathhorn and Randall J. Charbeneau,

HY Feb. 94, p134-146.

Stress-Deformation Behavior of an Embankment on Bos-Sucss-Detormation Behavior of an Embankment on Boston Blue Clay, Charles C. Ladd, Andrew J. Whitle and Dante E. Legaspi, Jr., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1730-1759.
A Survey of Stormwater Infiltration Basins in the Puget Sound Pagion, Versia Hilding and Pich Lewis (Westernament).

Sound Region, Karin Hilding and Rich Horner, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p722-

Temporary Shoring Support Systems in an Urban Environment, John E. Reinfurt, Thomas C. Anderson, Paul Reitz

and Tony Licari, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p24-42.
Two-Dimensional Modelling of Flow in the River Sava, Rudi Rajar and Matjaž Četina, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p309-323.

Uncertainty Analysis of Dredge Production with Correla-tion, Said M. Easa, WW Sept./Oct. 94, p499-507. Undersealing of Portland Cement Concrete Pavements: Does it Work? Ramzi Taha, Tom Papagiannakis and Ali Selim, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p163-169.

An Updated Fracture-Flow Model for Total-System Per-formance Assessment of Yucca Mountain, John H. Gauthier, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1663-1670.

The Use of By-Product Gypsum in Road Construction: a State-of-the-Art Summary, Ramzi Taha, Tom Papagiannakis, Roger Seals and Donald Saylak, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p170-177.

Using Performance Assessment for Radioactive Waste Disposal Decision Making—Implementation of the Methodology into the Third Performance Assessment Iteration of the Greater Confinement Disposal Site, David P. Gal-

legos, Stephen H. Conrad and Thomas A. Baer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1671-1681.

Performance standards

Management Strategy of Cement Industry in Technology Toward the Next Century, Hiroshi Uchikawa, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p524-561.

Permeability

- Air Permeability from Pneumatic Tests in Oxidized Till, Kenneth B. Edwards and LaDon C. Jones, EE Mar./Apr. 94, p329-347.
- Application of the Phase Change Process to One-Dimensinal Consolidation Behavior of Peat, Keiji Kogure, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), 9677-687.
- Benzene Transport Through Landfill Liners Containing Organophilic Bentonite, James A. Smith and Peter R. Jaffé, EE Nov./Dec. 94, p1559-1577.
- Compacted Clay Liners and Covers for Arid Sites, David E. Daniel and Yung-Kwang Wu, GT Feb. 93, p223-237.
- Consolidation Characteristics of an Offshore Clay Deposit, J. A. R. Ortigao and A. S. F. J. Sayao, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1415-1424.
- Cyclic Loading for the Measuring of Soil Consolidation Parameters, Alain Vuez and Abdou Rahal, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p760-774.
- Design of Landfill Leachate-Collection Filters, George R. Koerner, Robert M. Koerner and Joseph P. Martin, GT Oct. 94, p1792-1803.
- Effect of Gravel on Hydraulic Conductivity of Compacted Soil Liners, Thomas L. Shelley and David E. Daniel, GT Jan. 93, p54-68.
- Effect of Permeability on Surficial Stability of Homogeneous Slopes, Daniel Pradel and Glen Raad, GT Feb. 93, p315-332.
- Estimating Air Conductivity and Porosity from Vadose-Zone Pumping Tests, Joel W. Massmann and Mark Madden, EE Mar./Apr. 94, p313-328.
- Estimating Clay Liner and Cover Permeability Using Computational Neural Networks, Girish Agrawal, Saroj Weerarathe and Kris Khilhani, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p115-122.
- gineering, Khalil Khozeimeh, ed., 1994), p115-122.
 Hydraulic Conductivity of Compacted Clay Frozen and Thawed in Situ, Craig H. Benson and Majdi A. Othman, GT Feb. 93, p276-294.
- Improved Interpretation of Hvorslev Tests, Z. Demir and T. N. Narasimhan, HY Apr. 94, p477-494.
- Metakaolin Increases Strength and Lowers Permeability of High Performance Concrete, K. Gruber, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p613.
- Permeability Behavior of a Water Treatment Sludge, M. C. Wang and W. Tseng, GT Oct. 93, p1672-1677.
- Permeability Measurements for the Modelling of Wave Action On and In Porous Structures, Marcel R. A. van Gent, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p671-685.
- Prediction of Movement in Expansive Clays, Robert L. Lytton, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1827-1845.

- Rate of Settlement of Silt Alluvium at Trojan, Derek H. Cornforth, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Felio, ed., 1994), p1460-1471.
- Removal Of Chromium From Groundwater Using Permeable Barriers: An Aquifer Simulation Study, Mark D. Schmidt and Stephen P. Shelton, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p792-804.
- Seepage from Canal to Asymmetric Drainages, Abate T. Wolde-Kirkos and A. S. Chawla, IR Sept./Oct. 94,
- A Study of Two Phase Flow in Fracture Networks, Kenzi Karasaki, Stuart Segan, Karsten Pruess and Stratis Vomvoris, High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2633-2638.
- Tests for Flow along Vertically Stratified Porous-Media Interfaces, Ronald B. Manila, Jr. and J. Jeffrey Peirce, EE May/June 94, p527-542.
- Thermosyphon Analysis of a Repository: A Simplified Model for Vapor Flow and Heat Transfer, Randall D. Manteufel and Mark W. Powell, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2207-2216.
- Unbound Drainable Base Courses: Permeability Versus Unsurfaced Stability, Reed B. Freeman and Gary L. Anderton, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p685-692.

Under Cover, Neno Duplancic, CE Dec. 94, p70-71. Permeability tests

- Design of Clay Liner Permeability at Laboratory Scale Using Expert Systems, Imad A. Basheer, Wissam A. Naouss and Lakshmi N. Reddi, (Computing in Civil Engineering, Khalii Khozeimeh, ed., 1994), p273-276.
- Results of Air-Permeability Testing in a Vertical Borehole at Yucca Mountain, Nevada, G. D. LeCain and J.N. Walker, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p.2782-2788.
- Scaling Behavior of Gas Permeability Measurements in Volcanic Tuffs, Vincent C. Tidwell, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p2500-2509.

Permits

- Felinian Balancing Environmental Issues when Developing the Marina Project Scope, Jon Guerry Taylor, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p69–76.
- Combined Stormwater Drainage and Treatment, Jorge Romero-Lozano, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1229-1231.
- Coping with EPA's Transportation Storm Water Permit, James P. Amick, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1219-1223.
- Critical Issues in Post Disaster Code Enforcement, Wilson C. Barnes and Jose D. Mitrani, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p284-293.
- Cumulative Impact of Heavy Permit-Trucks on Steel Bridges, Michel Bruneau and Murat Dicleli, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p97-102.
- Federal Permits for Marina Development: Controlling the Process, Johnine J. Brown, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p144-153.
- Knaichik, ed., 1994), p14-153.
 NPDES Storm Water Permit Compliance at Air Force Installations, Paul Makowski and Marvin Smith, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1224-1228.
- N. Kunier, eu., 1994), p. 1224-1226.
 On "Solid" Golden Pond, Ronald J. Arceneaux and Dale L. Watson, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p. 170-179.

Overweight Trucks and Safety of Bridges, Gongkang Fu and Osman Hag-Elsafi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p284-289.

Reoperation of Existing Reservoirs to Serve Changing Needs: Observations on Institutional Inertia, Conflict, and Efficiency, Douglas P. Gillingham, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p565-568.

Simple Live Load Distribution Factors for Girder Bridges, Sami W. Tabsh, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p497-502.

Uniform State Registration and Permitting For High-Level Radioactive Waste Transportation, James B. Reed, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p158-162.

Personnel

Design/Build Prequalification System, Kevin J. Potter and Victor Sanvido, ME Mar./Apr. 94, p48-56.

Human-Resource Management for Twenty-First Century: Managing Diversity, Deborah A. Foley, El Apr. 94, p121-128.

MIS Links Personnel Projects, Proposals, ME Mar./Apr. 94, p3.

Six Steps to Better Recruiting, Bob Burfeind, ME Nov./ Dec. 94, p14-16.

Personnel development

Bringing the Construction Foreman Into the Computer Age, Richard J. Coble, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1446-1453.

Managing Performance of Engineers, Tom D. McFarland, ME Sept./Oct. 94, p28-33.

Mentoring for Consulting Engineers, John Dionisio, ME Sept./Oct. 94, p16-19.

Personnel management

EEO, ADA and Hiring, Mark Disney, ME May/June 94, p18-21.

Human-Resource Management for Twenty-First Century: Managing Diversity, Deborah A. Foley, El Apr. 94, p121-128.

Perturbation

Stochastic Analysis of Ground-Water Flow in Semiconfined Aquifer, Mysore G. Satish and Jianting Zhu, HY Feb. 94, p147-168.

Theoretical study of unstable waves in the rapids of the river, H. Kyotoh, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1265-1269.

Pesticides

Biotransformation of Pesticides in Simulated Groundwater Columns, Gregory G. Wilber and Stuart R. Garrett, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p368-375.

Effects of Golf Course Management on Pesticide and Fertilizer Fate, S. K. Starrett, N. E. Christians and T. A. Austin, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p526-533.

Interfacing GIS and Water Quality Models for Agricultural Areas, Vassilios A. Tsihrintzis, Hector R. Fuentes and Rao K. Gadipudi, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p.252-256.

A model to describe the fate of agricultural pollutants, A. Pinheiro and B. Caussade, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p170-174.

Modeling of Chemical Inhibition of Nitrification, Robert W. Okey and H. David Stensel, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p297-304.

Reconstruction of Concentration Boundary Condition for Unsteady Pesticide Transport Modeling, Deborah J. Mossman and Nael Al Mulki, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p160-164.

Petrochemicals

Wind Forces on Industrial Facilities, Joseph A. Bohinsky and Hikmat E. Zerbe, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1036-1041.

Petrographic analysis

Evidence for a Welded Tuff in the Rhyolite of Calico Hills, Robert P. Dickerson and W. Clay Hunter, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1861-1868.

The Hidden Cost of Clean Air Regulations, Bernard H. Hertlein and Matthew R. Johnson, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed.,

1994), p1119-1126.

Inferences of Paleoenvironment From Petrographic, Chemical and Stable-Isotope Studies of Calcretes and Fracture Calcites, David T. Vaniman and Joseph F. Whelan, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2730-2737.

Petrographic and Geochemical Characteristics of a Section Through the Tiva Canyon Tuff at Antler Ridge, Yucca Mountain, Nevada, Frances R. Singer, Frank M. Byers, Jr., Beth L. Widmann and Robert P. Dickerson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1869-1879.

Petroleun

Houdini: In-Tank Mobile Cleanup Robot, Hagen Schempf, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p286-295.

The Inelastic Response of an Offshore Platform in Hurricane Andrew, Gary R. Imm, Patrick E. O'Connor and James M. Light, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p7-12.

Monitoring Petroleum Contamination in an Aquifer, Paramesh Anantharaman and Joseph C. Cataldo, (Hydrallic Engineering '94', George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p272-276.

Oil and Gas Exploration Near Yucca Mountain, Southern Neards Lebeb Comp. Checker B. Poeker and Nation C.

Oil and Gas Exploration Near Yucca Mountain, Southern Nevada, John A. Grow, Charles E. Barker and Anita G. Harris, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1298-1315.

1994), p1236-1315.
Petroleum Contaminated Soils in Highway Construction, Jay N. Meegoda, A. Samer Ezeldin, David A. Vaccari and Robert T. Mueller, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p904-911.

Petroleum Hydrocarbons in Detention-Basin Sediments, Thomas J. Maldonato and Christopher G. Uchrin, EE

May/June 94, p683-690.

Sensitized Photooxidation of Dissolved Sulfides in Water, T. F. Brewer, J. G. Curtis, E. A. Marchand, V. D. Adams and E. J. Middlebrooks, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p233-240.

Soil Washing and Biotreatment of Petroleum-Contaminated Soils, Alok Bhandari, Dennis C. Dove and John T. Novak, EE Sept./Oct. 94, p1151-1169.

Pfrang, Ed

After 11 Years at ASCE's Helm, Ed Pfrang Reflects on the Society, the Profession and Himself, NE Nov. 94, p1-2.

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ASCE Executive Director Announces Retirement Plans, CE Jan. 94, p76.

Davis to be ASCE Executive Director, CE June 94, p75.

nН

Analysis of Biomass Distribution and Chemical Interactions in Nitrifying Biofilms, Edna M. C. V. Flora, Joseph R. V. Flora, Makram T. Suidan and Byung J. Kim, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p305-312.

Controlling Lead and Copper Corrosion and Sequestering of Iron and Manganese, Jonathan A. Clement, Michael Schock and Darren Lytle, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p1-8. Effect of Alkalinity on Copper Corrosion, Travis E. Meyer and Marc Edwards, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Ed-

wards, ed., 1994), p9-16.

Effects of Molecular Oxygen and pH on the Adsorption of Aniline to Activated Carbon, Peter Fox and Kamalesh Pinisetti, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p617-623.

Effects of Temperature and pH on Residual Aluminum in Alkaline-Treated Waters, John E. Van Benschoten, James N. Jensen and Md. A. Rahman, EE May/June 94,

p543-559.

Evaluation of Enhanced Coagulation for DBP Control, Richard J. Miltner, Sheila A. Nolan, Marcus J. Dryfuse and R. Scott Summers, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p484-491.

The Present State-of-the-Art of Immobilization of Hazardous Heavy Metals in Cement-Based Materials, David Bonen and Shondeep L. Sarkar, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p481-498.

Removal of Formate from Wastewater by Anaerobic Process, Ho Kwong Chui, Herbert H. P. Fang and Yu You Li, EE Sept./Oct. 94, p1308-1320.

Activated Carbon as a Catalyst for Polymerization of Phenolic Compounds, Jacob A. Bourdeau and Radisav D. Vidic, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed.,

1994), p756-763.

1994), p.706-703.

The Evaluation of Empty Bed Contact Time on the Biodegradation of Pentachlorophenol using an Anaerobic GAC Fluidized Bed, Gregory J. Wilson, Julie A. Wagner, Amid P. Khodadoust, Makram T. Suidan and Richard C. Brenner, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p624-631.

The Sensitived Photograthysis of a Mixed Reactant System. The Sensitized Photocatalysis of a Mixed Reactant System

of 4-Chlorophenol and 4-Nitrophenol, Melissa S. Dieck-mann, Kimberly A. Gray and Prashant V. Kamat, (Criti-cal Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p726-732.

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Philippine President Ramos Becomes ASCE Honorary Fellow, NE Sept. 94, p15.

Station-Year Approach: Tool for Estimation of Design Floods, Henri Garros-Berthet, WR Mar./Apr. 94, p135-

Phosphoric acid

By-Product of Sulfur Recovery from Phosphogypsum as Concrete Aggregate, Amitava Roy, Gary R. Byerly and Roger K. Seals, MT Nov. 94, p439-452.

Phosphorus
Non-Point Pollution Loadings and their Impacts on Tenon-round rotation Loadings and their impacts of ren-nessee Valley Reservoirs, Julia Burr Avera and John A. Gordon, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1247-1251.

Non-Point Source Pollution Reduction, J. Thomas Franques and Rhonda L. Townsend, (Hydraulic Engi-neering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1252-1256.

Nutrient Leaching from Alfalfa Irrigated with Municipal

Wastewater, Scott F. Korom and Roland W. Jeppson, EE Sept./Oct. 94, p1067-1081.

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Phosphorus removal

Regional Optimization of Non-Point Source Load Reduc-tion, J. Thomas Franques and Rhonda L. Townsend, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p262-266.

Restoring the Everglades, James Best Jackson, Larry Fink and Gary Goforth, CE Mar. 94, p52-55.

Three-Stream Bioprocess Fights Phosphorus in Wastewater Effluent, ET June/July 94, p8.

Photochemical reactions

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Photocatalytic Transformations and Degradation of 2,4,6-trinitrotoluene (TNT) in TiO2 Slurries, Daniel C. 2.4.0-tillintonate (1N1) in 1102 startles, Daniel C. Schmelling and Kimberly A. Gray, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p751-755.

The Sensitized Photocatalysis of a Mixed Reactant System of 4-Chlorophenol and 4-Nitrophenol, Melissa S. Dieckmann, Kimberly A. Gray and Prashant V. Kamat, (Criti-cal Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p726-732

Sensitized Photooxidation of Dissolved Sulfides in Water, T. F. Brewer, J. G. Curtis, E. A. Marchand, V. D. Adams and E. J. Middlebrooks, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p233-240.

Photoelasticity

Investigation of Faulted Tunnel Models by Combined Photoelasticity and Finite Element Analysis, Samaan G. Ladkany and Yuping Huang, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1979-1986.

Photogrammetry

A new approach for the estimation of extreme roughness in torrents by Hydraulic and Photogrammetry, Hanspeter Hodel, Thomas P. Kersten and Isidor Storchenegger, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p697-701.

Photographic analysis

High-speed Video Analysis of Sediment-Turbulence Inter-action, Yarko Niño, Fabián López and Marcelo García, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p213-222.

On Measurements of Particle Spinning Motion, Hong-Yuan Lee and In-Song Hsu, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p149-158.

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Physical properties

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Use of Gel-Permeation Chromatography in Predicting Properties of Asphalt, Norman W. Garrick, MT Aug. 94, p376-389.

Piers

Bridge Pier Scour Equations - An Assessment, Alimul Qadar and Sarfaraz A. Ansari, (Hydraulic Engineering 94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p61-67.

Bridge Scour During the 1993 Floods in the Upper Mississippi River Basin, Gordon G. Barksdale, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p21-25.

Bridge Scour Instrumentation, P. F. Lagasse, E. V. Richardson and S. A. Sabol, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p36-40.

Case Study of Navy Pier Pile Foundation Installation, Richard A. Nebel, II and Jeffrey S. Russell, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p311-320.

Clear-Water Scour around Bridge Pier Group, Nandana Vittal, U. C. Kothyari and Morteza Haghighat, HY Nov. 94, p1309-1318.

Contraction Scour at a Bridge over the Iowa River, Edward E. Fischer, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p31-35.

Control of Settlement and Uplift of Structures Using Short Aggregate Piers, Evert C. Lawton, Nathaniel S. Fox and Richard L. Handy, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p121-132.

Cost Considerations in Planning Pier Terminals, E. S. Dada and S. C. Wirasinghe, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994),

p183-192.

Damage Evaluation of Building on Piers in Expansive Clay, Richard J. Finno, Gary J. Klein and Paul J. Saba-tini, (Vertical and Horizontal Deformations of Founda-tions and Embankments, Albert T. Yeung, ed. and Guy

tons and Embankments, Albert 1. Yeung, ed. and Guy Y. Félio, ed., 1994a, pl 482-1493.
Effect of Bridge Pier Shape and Contraction Ratios on Backwater Profile, Sabah Al-Nassri, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994a, p563-568.

Effect of Pier Geometry on Scour in Graded Gravels, Luis Ayala and Francisco Grandón, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p73-77

Effects of Flow Duration on Local Scour at Bridge Piers in New York, Gerard K. Butch and Richard Lumia, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p46-50.

Failure Stages in Timber Fixed Piers: Design for Minimal Reconstruction After a Storm, Jon Guerry Taylor and Mark D. Bolchoz, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p406-413. Fraser Lands Riverfront Park Shoreline Edge Treatments,

Stanley R. Cowdell and Harold C. Westerman, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p114-123. Graphite Prestressed Concrete Deck for Navy Facilities,

Srinivasa L. Iyer, Vijayakumar Ranganathan and Randy Bagby, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p400-407

Graphite Prestressed Piles and Fiberglass Prestressed Pilecaps for U.S. Navy Pier at California, Srinivasa L. lyer and Ramabhadran Sivakumar, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p392-399.

Low Strain Dynamic Testing of Wood Piles Supporting an Existing Pier, Mohamad Hussein, William Wright and Existing Fielt, Mohamad russein, winfam Wright and Billy Edge, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p940-945.

Multiple Use Pier Facilities in Parks, Jim Posda and Jon

Guerry Taylor, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p414-423.

1994), p414-42.3
Phased and Layered Sampling for Navy Dredging, Sherry L. Ashbaugh, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1436-1440.
Practical Method for Calculating Contraction Scour, E. V. Richardson and J. R. Richardson, (Hydraulic Engineeric) '04 Course V. Carene. ing '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p6-10.

Practical Method for Scour Prediction at Bridge Piers, J. R. Richardson and E. V. Richardson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer,

ed., 1994), p1-5.

Real-Time Data Collection of Scour at Bridges, David S. Mueller and Mark N. Landers, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p104-113.

tation, Clifford A. Pugn, ed., 1994, p10-113.
Sensitivity Analysis of Bridge Equations, Jeffrey S. Glenn,
(Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p11-15.

Settlement of Structures Supported on Marginal or Inad-equate Soils Stiffened With Short Aggregate Piers, Evert C. Lawton and Nathaniel S. Fox, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p962Settlement Prediction for Driven Piles and Pile Groups, Harry G. Poulos, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1629-1649.

Short Aggregate Piers Defeat Poor Soils, Nathaniel S. Fox, Evert C. Lawton and Richard L. Handy, CE Dec. 94,

Stability of Masonry Piers and Arches Including Sliding, Thomas E. Boothby, EM Feb. 94, p304-319.

Stabilization and Expansion of Historic Navy Pier, Patrick M. Doher and Bernard J. Fekete, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p300-310.

Supercritical Flow Behind Chute Piers, Roger Reinauer and Willi H. Hager, HY Nov. 94, p1292-1308.

Ultimate Depth of Scour Around Bridge Piers, Sarfaraz A.

Ansari and Alimul Qadar, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p51-55.

470

Calibration Chamber Studies of Piezocone Test in Cohesive Soils, P. U. Kurup, G. Z. Voyiadjis and M. T. Tumay, GT Jan. 94, p81-107.

Cover-Subsidence Sinkhole Evaluation of State Road 434, Longwood, Florida, Jon Foshee and Brian Bixler, GT

Nov. 94, p2026-2040.

Innovative Instrumentation for a Physical Model of River Ice Transport, Johannes Larsen, Jon E. Zufelt and Randy D. Crissman, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p259-267.

A Piezoelectric Sediment Density Probe, I. R. McDermott, A. D. King and S. J. Smyth, (Dredging '94, E. Clark

McNair, Jr., ed., 1994), p239-248.

Soil-Cover Success, Issa S. Oweis, George Dakes, Thomas Marturano and Richard Wierer, CE Oct. 94, p58-59.

Pile bearing capacities

Nonlinear Axial Interaction in Pile Dynamics, Mohamed H. El Naggar and Milos Novak, GT Apr. 94, p678-696.

Nonlinear Model for Dynamic Axial Pile Response, Mohamed H. El Naggar and Milos Novak, GT Feb. 94, p308-329.

A program for the Analysis of Pile Load Tests, Rajesh Subramanian and Reda M. Bakeer, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p644-651.

Setup and Relaxation in Glacial Sand, Donald L. York, Walter G. Brusey, Frank M. Clemente and Stephen K. Law, GT Sept. 94, p1498-1513.

Simplified Dynamic Method for Pile-Driving Control, Robert Y. Liang and Abdallah I. Husein, GT Apr. 93,

Some Aspects of Determination of Pile Capacity by the Wave Equation, Mark R. Svinkin and Wondem Teferra, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p946-951.

Graphite Prestressed Concrete Deck for Navy Facilities, Srinivasa L. Iyer, Vijayakumar Ranganathan and Randy Bagby, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p400-407.

Graphite Prestressed Piles and Fiberglass Prestressed Pilecaps for U.S. Navy Pier at California, Srinivasa L. Iyer and Ramabhadran Sivakumar, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p392-399.

Practical Method for Scour Prediction at Bridge Piers, J. R. ing '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1-5. Richardson and E. V. Richardson, (Hydraulic Engineer-

Building KBES for Diagnosing PC Pile with Artificial Neural Network, Yi-Cherng Yeh, Yau-Hwaug Kuo and Deh-Shiu Hsu, CP Jan. 93, p71-93.

Deformations in Sand Layer During Pile Driving, Francis D. Leathers, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p257-268.

- Design & Construction of the Liberty Street Bridge Earth Support System, David R. Chapman, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p112-129.
- Estimating Sediment Relative Density Using an Impact Core Sampler and Wave Equation-based Pile Analysis, James M. Schmidt and Donald E. Bruggers, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1212-1219.

Setup and Relaxation in Glacial Sand, Donald L. York, Walter G. Brusey, Frank M. Clemente and Stephen K. Law, GT Sept. 94, p1498-1513.

Simplified Dynamic Method for Pile-Driving Control, Robert Y. Liang and Abdallah I. Husein, GT Apr. 93, p694-713.

Wave Equation Parameters from Driven-Rod Test, Robert Y. Liang and Yuanjing Sheng, GT June 93, p1037-1057.

Pile foundation design

Design of Underpinning Piles to Reduce Settlements, H. G. Poulos, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1000-1010.

The Effect of Live Load on Downdrag Forces, Samuel A. Leifer, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p949-961.

Fast Foundation for Soft Clay, Joseph R. Hilton, Jr., Richard L. Novotny and Ronald E. Rager, CE Mar. 93, p62-65

Nonlinear Three Dimensional Analysis of Downdrag on Pile Groups, Sangseom Jeong and Jean-Louis Briaud, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994, p. 136-6-1384.

Pile foundations

Case Study of Navy Pier Pile Foundation Installation, Richard A. Nebel, II and Jeffrey S. Russell, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p311-320.

Lateral Cyclic Response of Pile in Viscoelastic Winkler Subgrade, Shintaro Yao and Toyoaki Nogami, EM Apr. 94, p758-775.

Movement of Foundations on Rock, Ian W. Johnston, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1703-1717.

Numerical Study of Underpinning by Piles for Settlement Control of Strip Foundations, M. Makarchian and H.G. Poulos, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p303-313.

Prediction of Observed Bridge Response with Soil-Pile-Structure Interaction, N. Makris, D. Badoni, E. Delis and G. Gazetas, ST Oct. 94, p2992-3011.

Stabilization and Expansion of Historic Navy Pier, Patrick M. Doses and Bernard J. Fekete, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p300-310.

Pile granns

Lateral Load Analysis of Groups of Piles and Drilled Shafts, Phillip S. K. Ooi and J. Michael Duncan, GT June 94, p1034-1050.

Nonlinear Axial Interaction in Pile Dynamics, Mohamed H. El Naggar and Milos Novak, GT Apr. 94, p678-696.

Nonlinear Three Dimensional Analysis of Downdrag on Pile Groups, Sangseom Jeong and Jean-Louis Briaud, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994, p.1366-1384.

Prediction of Observed Bridge Response with Soil-Pile-Structure Interaction, N. Makris, D. Badoni, E. Delis and G. Gazetas, ST Oct. 94, p2992-3011.

Settlement Prediction for Driven Piles and Pile Groups, Harry G. Poulos, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1629-1649.

Pile load tests

Design and Performance of a Piled Raft Foundation, Mark Randolph and Patrick Clancy, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p314-324.

A program for the Analysis of Pile Load Tests, Rajesh Subramanian and Reda M. Bakeer, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p644-651.

Static Pile Load-Movement From Dynamic Measurements, Frank Rausche, Mohamad Hussein, Garland Likins and Gabriel Thendean, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p291-302.

Structural Capacity of Precast Piles with Grouted Base, Osamu Kusakabe, Masaaki Kakurai, Katsutoshi Ueno and Yoshinao Kurachi, GT Aug. 94, p1289-1306.

Pile settlemen

Approximate Elastic-Plastic Solution for Axially Loaded Piles, Ernesto Motta, GT Sept. 94, p1616-1624.

Comparison of Settlement Predictions for Single Piles in Sand Based on Penetration Test Results, James B. Nevels and Donald R. Snethen, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1028-1038.

Pile Settlement Based on Dynamic Measurements, Samuel G. Paikowsky, Valerie A. LaBelle, John E. Regan and Les R. Chernauskas, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Felio, ed., 1994), p269-278.

A program for the Analysis of Pile Load Tests, Rajesh Subramanian and Reda M. Bakeer, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p644-651.

Static Pile Load-Movement From Dynamic Measurements, Frank Rausche, Mohamad Hussein, Garland Likins and Gabriel Thendean, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p291-302.

Pile structures

Second Order Directional Wave Kinematics in Shallow Water, Jagat N. Sharma and R. G. Dean, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p165-179.

Pile test

Fast Foundation for Soft Clay, Joseph R. Hilton, Jr., Richard L. Novotny and Ronald E. Rager, CE Mar. 93,

Measured Downdrag on Seven Coated and Uncoated Piles in New Orle ns, Randall K. Bush and Jean-Louis Briaud, (Verticci and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1011-1027.

Mechanisms of Shaft Friction in Sand from Instrumented Pile Tests, B. M. Lehane, R. J. Jardine, A. J. Bond and R. Frank, GT Jan. 93, p19-35.

Dilec

Approximate Elastic-Plastic Solution for Axially Loaded Piles, Ernesto Motta, GT Sept. 94, p1616-1624.

Arching in Piled Embankments, B. K. Low, S. K. Tang and V. Choa, GT Nov. 94, p1917-1938.

Downdrag on Piles: Review and Recent Experimentation, John Anthony Little, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T.

Yeung, ed. and Guy Y. Félio, ed., 1994), p1805-1826.Effects of Cyclic Lateral Loads on Piles in Sand, J. H. Long and Gheert Vanneste, GT Jan. 94, p225-244.

Graphite Prestressed Concrete Deck for Navy Facilities, Srinivasa L. Iyer, Vijayakumar Ranganathan and Randy Bagby, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p400-407.

Graphite Prestressed Piles and Fiberglass Prestressed Pilecaps for U.S. Navy Pier at California, Srinivasa L. Iyer and Ramabhadran Sivakumar, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p392-399.

High-Strain Kinetic Testing of Deep Foundations, Alain E. Holeyman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p934-939.

Jacket Arrest Cracking of Prison Bridge Piles, CE Dec. 94, p14,16-17.

Lateral Load Analysis of Single Piles and Drilled Shafts, J. Michael Duncan, Leonard T. Evans, Jr. and Phillip S. K. Ooi, GT June 94, p1018-1033. Laterally Loaded Piles in Elastic Media, Keming Sun, GT

Aug. 94, p1324-1344.

Low Strain Dynamic Testing of Wood Piles Supporting an Existing Pier, Mohamad Hussein, William Wright and Existing Fier, withhalmal russein, withain wright and Billy Edge, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p940-945. Mechanisms of Shaft Friction in Sand from Instrumented Pile Tests, B. M. Lehane, R. J. Jardine, A. J. Bond and R.

Frank, GT Jan. 93, p19-35.

Nonlinear Axial Interaction in Pile Dynamics, Mohamed H. El Naggar and Milos Novak, GT Apr. 94, p678-696. Nonlinear Model for Dynamic Axial Pile Response, Mohamed H. El Naggar and Milos Novak, GT Feb. 94,

p308-329

P-Ultimate for Undrained Analysis of Laterally Loaded Piles, James D. Murff and Jed M. Hamilton, GT Jan. 93, p91-107.

Pilkey, Orrin H.

Orrin H. Pilkey, Design Engineer Who Wrote Books on Solid Mechanics, Dies at 89, NE Aug. 94, p6.

New Guidelines for Southern Pine Uses in Coastal Marine Construction, Jon Guerry Taylor, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p480-488.

Pipe design

Basics of Flexible Pipe Structural Design, R. C. Prevost and K. K. Kienow, TE July/Aug. 94, p652-671. Large Diameter Storm Sewer with Energy Dissipation Structures, Lynn Hill, John Maki and Jerry Pfarr, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p395-410.

New Modulus of Soil Reaction - E' Values for Buried Thermoplastic Pipe Design, Jey K. Jeyapalan and Peggy A. Jaramillo, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p239-260. Vacuum Design of Welded Steel Pipe Buried in Poor Soil,

Reynold K. Watkins and George J. Tupac, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p226-238.

Pipe diameter

Specification Contract Effects on Hydraulic Designs, Jeff Baysinger and Leo Kinney, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p152-158.

Pipe flow

CDR - A Chemical Solution to a Mechanical Problem, Gary E. Blizzard, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p172-181

Dimensionally Homogeneous Manning's Formula, Ben Chie Yen, HY Sept. 92, p1326-1332.

Energy Loss at Combining Pipe Junction, Marc Serre, A. Jacob Odgaard and Rex A. Elder, HY July 94, p808-

Hydraulic Transients in Two Acid Transfer Lines, Muin M. Baasiri, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p129-151.

Hydraulics of Stationary Capsule in Pipe, Henry Liu and James L. Richards, HY Jan. 94, p22-40.

The Performance of Unconfined Hollow Fiber Membranes as Pipe Flow and Mixed Flow Aerators, Drew W. Johnson and Michael J. Semmens, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p106-113.

Predicting Pipe Failure Effects in Water Distribution Networks, P. W. Jowitt and Chengchao Xu, WR Jan./Feb.

93, p18-31.

Reliability Analysis of Water-Distribution Systems, Rajesh Gupta and Pramod R. Bhave, EE Mar./Apr. 94, p447-460

Pipe jacking

Tracking and Steering Systems in Trenchless Construction, R. Tanwani and D. T. Iseley, CO Mar. 94, p65-76. Trenchless Relief, Tad Pilecki, Stephen J. Klein and Art

Hamid, CE Jan. 94, p58-60.

Pipe joints

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Energy Loss at Combining Pipe Junction, Marc Serre, A. Jacob Odgaard and Rex A. Elder, HY July 94, p808-

Pipe laying

Protecting a Pipeline, Manuel Garcia-Lopez and Donald H. Gray, CE Dec. 94, p44-47.

Rehabilitation of Belle Isle Siphon in Boston, Massachusetts, Emile Hamwey and Lisa Harris, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p247-256.

Pipe lining

Flow Capacity of Rehabilitated Sanitary Sewers, Kenneth K. Kienow, Karl E. Kienow and Paul E. Kienow, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p28-42.

Raw Water Cement-Mortar Lined Pipeline Corrosion A Case Study, Charles F. Anderson, Jr., (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H.

Wegener, ed., 1994), p372-386.

Round Rock Dam, Outlet Works Modification, Bruce D. Feinberg, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p411-423.

Structural Characteristics of the Danby Pipe Renovation System, Shuaib Ahmad and George McAlpine, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p239-246.

Pipe networks

Genetic Algorithms Compared to Other Techniques for Pipe Optimization, Angus R. Simpson, Graeme C. Dandy and Laurence J. Murphy, WR July/Aug. 94, p423-

Inverse Transient Analysis in Pipe Networks, James A. Liggett and Li-Chung Chen, HY Aug. 94, p934-955.

Modeling Pipe Networks Dominated by Junctions, Don J. Wood, L. Srinivasa Reddy and J. E. Funk, HY Aug. 93, p949-958.

Reliability Analysis of Water-Distribution Systems, Rajesh Gupta and Pramod R. Bhave, EE Mar./Apr. 94, p447-460

Pine tests

Improving the Pipeline Hydrostatic Leak Test Model, Rod-ney F. Wedge, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p182-205.

Overcrossing a Freeway with Water Pipelines in Dedicated Structures, Richard J. Pardini, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p387-394.

Pipeline design

Doubling A Pipeline, Gary Walker and John Myrick, CE Jan. 94, p50-53.

Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994, 0-7844-0024-5, 502pp.

Improving the Pipeline Hydrostatic Leak Test Model, Rod-ney F. Wedge, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p182-205.

Innovative Design of a Multiport Diffuser, Mindy L. Roberts and Bernadette H. Kolb, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p56-65.

Steel Raw Water Pipeline Design Development, Steven J. Troch, Roger Strube and Lynn Hill, (Hydraulics of Pipe lines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p473-491.

Sudden Pressure Drop and Pipeline Failure - Case Studies, E. John List, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p339-355.

The Total System Approach to Efficient Pipeline Design, Randal W. Stuart, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p159-

Analysis of Unstiffened and Stiffened Tubular Members Under External Pressure and Structural Loads, Spyros A. Karamanos and John L. Tassoulas, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1520-1525.

Analyzing Field Data for Hazen-Williams and Darcy-Weisbach Equations, Donald Clark, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed.,

1994), p1-9.

Coal Log Pipeline Technology: State of Development, Henry Liu and Charles W. Lenau, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p280-287.

Cross-Flow Vibrations of Cylinder in Irregular Oscillatory Flow, Andrzei Kozakiewicz, B. Mutlu Sumer and Jørgen

Fredsøe, WW Nov./Dec. 94, p515-534. Doubling A Pipeline, Gary Walker and John Myrick, CE

Jan. 94, p50-53.

Dual Purpose Pipeline in the 1900s Environment, Randall C. Hill and Javier Saunders, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p119-128.

Equivalent Differential Equations in Fixed-Grid Characteristics Method, Mohamed S. Ghidaoui and Bryan W. Kar-

ney, HY Oct. 94, p1159-1175

Filling of Pipelines with Undulating Profiles, Chyr Pyng Liou and William A. Hunt, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p104-118.

Graphical Network Model Simplifies Water Analysis, Mi-chael D. Larkin, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p296-

Headloss Analysis for Modern Piping Systems, L. Gregg Horn, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p10-27.
How to Improve Control of Flow and Reduce Cavitation,

Ergun Bakall, Michael T. Stift and Paul W. Johnson, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p89-103. Hydraulic Analysis of an HDPE Water Supply Pipeline,

Hydraulic Analysis of an HDPE Water Supply Pipeline, Yifan Zheng and Adnan M. Alsaffar, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p318-328.Hydraulic Analysis of the Water Distribution System, Vail Valley Consolidated Water District, Vail, Colorado, Mark Rosser and Kevin W. McBrien, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p452-472. Wegener, ed., 1994), p452-472.

Hydraulic Transients in Two Acid Transfer Lines, Muin M.

Baasiri, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p129-151.
 Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas

H. Wegener, ed., 1994, 0-7844-0024-5, 502pp. Hydraulics of Stationary Capsule in Pipe, Henry Liu and James L. Richards, HY Jan. 94, p22-40.

Influence of Liquid Length Variation in Hydraulic Tran-

sients, Enrique Cabrera, José Abreu, Rafael Pérez and

sients, Enrique Cabrera, José Abreu, Rafael Pérez and Antonio Vela, HY Dec. 92, p1639-1650. Internal Pipeline Corrosion Coatings Case Studies and So-lutions Implemented, Ronald E. Carlson, Jr., (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p206-211. Jointless Pipeline Spans Pensacola Bay, CE Sept. 94, p96. Measuring and Modeling Chlorine Propagation in Water Distribution Systems, Robert M. Clark, Walter M. Gray-man Lames A. Goodrich, Rolf A. Depinger, and Kenman, James A. Goodrich, Rolf A. Deininger and Kenneth Skov, WR Nov./Dec. 94, p871-887 Numerical Comparison of Pipe-Column-Separation Mod-

els, Angus R. Simpson and Anton Bergant, HY Mar. 94,

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Offshore Rescue, Jonathan A. French, Paul Gustafson, John S. Murk and Kellene M. Burn-Lucht, CE Oct. 94, p42-

Parameter Estimation in Water-Distribution Systems by Least Squares, R. S. N. Datta and K. Sridharan, WR

Least Squares, R. S. N. Datta and R. Strunaran, wr. July/Aug. 94, p405-422.

Planning, Assessing and Implementing Diagnostic Rehabilitation Options, B. Jay Schrock, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drain age Rehabilitation Programs and Techniques, ASCE, 1994), p101-110.

Protecting a Pipeline, Manuel Garcia-Lopez and Donald H. Gray, CE Dec. 94, p44-47.

Raw Water Cement-Mortar Lined Pipeline Corrosion A Case Study, Charles F. Anderson, Jr., (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p372-386.

Reliability of Underground Pipelines Subject to Corrosion, M. Ahammed and R. E. Melchers, TE Nov./Dec. 94,

Remote Sensing Pipeline Rehabilitation Methodologies Based Upon the Utilization of Infrared Thermography, Gary J. Weil, Richard J. Graf and Leann M. Forister, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p173-181.

Sediment and Debris Removal Inlet Structure for Canal Pipelines, Gilbert Horrocks, H. Lee Wimmer and Pam

McMullin, IR May/June 94, p607-616.

Slurry Trenching for Waterway Pipeline Installation, Samuel Carreon and Brian Doeing, (Hydraulics of Pipe-lines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p261-279.

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Sudden Pressure Drop and Pipeline Failure - Case Studies, E. John List, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p339-355.

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Wichita Aquifer Gets Big Charge From Little Arkansas, CE Sept. 94, p13.

Yellowman Siphon Rehabilitation, Scott A. Stevens, (Hy-draulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p82-88.

The Danby Pipe Renovation System, George McAlpine, (Urban Drainage Rehabilitation Programs and Techriques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p144-158.

Determining Optimal Parameter Dimensions for Water Distribution Network Models, Keshaw N. Mallick, Kevin E. Lansey and Kevin S. Tickle, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and

Harry N. Tuvel, ed., 1994), p758-761.

Effect of Alkalinity on Copper Corrosion, Travis E. Meyer and Marc Edwards, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p9-16.

Effect of Temperature Changes on Water-Main Breaks, Ahmad Habibian, TE Mar./Apr. 94, p312-321.

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Round Rock Dam, Outlet Works Modification, Bruce D. Feinberg, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p411-423.

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Specification Contract Effects on Hydraulic Designs, Jeff Baysinger and Leo Kinney, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p152-158.

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Chemical Cleaning Process for Water Pipe Systems, Craig Edstrand, Allen Hieatt and Jerome Ludwig, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p288-295.

Constitutive Model for Viscoelastic-Fluid Dampers, Nicos Makris, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p857-862.

Headloss Analysis for Modern Piping Systems, L. Gregg Horn, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p10-27.

Laplace Valve Stroking for Complex Piping Systems, Donald Serpas, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p939-943

Wind Forces on Industrial Facilities, Joseph A. Bohinsky and Hikmat E. Zerbe, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1036-1041.

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Bechtel Automated Lift Planning System, Craig Bennett and Steve Ditlinger, (Robatics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p401-409.

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Developing Plans for Robotic Excavators, Sanjiv Singh, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p88-96.

Development of Transport Model for Groundwater Planning and Management in Taipei Basin, Nien-Sheng Hsu, Ming-Jame Horng, Chian Min Wu, William W-G. Yeh and Jan-Tai Kuo, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p332-335.

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The Economic Cost of Stocking Catchable Rainbow Trout, Donn M. Johnson and Richard G. Walsh, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p549-552.

Efficient Path Planning Strategies for Unmanned Rover Vehicles, Kevin K. Gifford and George W. Morgenthaler, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1288-1308.

Electronic Yellow Pages for Pre-trip Planning Systems, Prasuna DVG Reddy, Ryuichi Kitamura and Paul P. Jovanis, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1516-1523.

Framework and Status of the ASCE Parks & Recreation Planning Guide, Marshall Flug, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p187-195.

Graphic Visualization for Planning Heavy Lifts, Parmanand V. Dharwadkar, Koshy Varghese, James T. O'Connor and Thomas M. Gatton, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), 7759-766.

Groundwater Modelling As a Management Tool, Courtney C. Hemenway, Al Eddebbarh and Paul Grundemann, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p596-599.

High Performance Construction Materials and Systems: An Essential Program for America and Its Infrastructure - Technical Report, Report 93-5011, Civil Engineering Research Foundation, 1993, 0-87262-939-2, 205pp.

High-Performance Construction Materials and Systems: An Essential Program for America and Its Infrastructure -Executive Report, Report 93-5011.E, Civil Engineering Research Foundation, 1993, 0-87262-938-4, 32pp.

Information Modeling and Applications, Victor E. Sanvido, Kirby A. Kuntz, Theodore D. Lynch, John I. Messner and David R. Riley, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p786-789.

Integrated Planning for International River Basin, Alvin S. Goodman, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p130-134.

A Knowledge-Intensive Database System for Making Effective Use of Construction Lessons Learned, Nabil Kartam, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1139-1145.

Lessons Learned from the Hurricanes of 1992, Ronald A. Cook, Mehrdad Soltani and Timothy A. Reinhold, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p799-802.

Limits of Reasonable Planning, Carlos M. H. Stegmann, El July 94, p246-253.

Managerial Aspects of Information-Technology Strategies for A/E/C Firms, James Breuer and Martin Fischer, ME July/Aug. 94, p52-59.

Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994, 0-7844-0028-8, 620pp.

Marketing Professional Services in Asia, Shawn R. T. Severn and K. V. Lew, ME Sept./Oct. 94, p24-26.

Master Planning -- "Fact or Fiction", Marcus D. Hodges, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p77-82. Navigation of an Autonomous Robot Vehicle, Arturo L. Rankin, David G. Armstrong, II and Carl D. Crane, III, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed. 1994) p44-51.

setz, ed. and Paul R. Klarer, ed., 1994), p44-51. An Overview of A.S.C.E. Manual 50 "Planning and Design Guidelines for Small Craft Harbors", Fred A. Klancnik, (Marinas. Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p196-200.

Planning and Design Guidelines for Small Craft Harbors, Revised edition (M&R No. 50), Task Committee on Marinas 2000, American Society of Civil Engineers, (Fred Klancnik, chmn.), 1994, 0-7844-0033-4, 291pp.

Planning and Management of Change, Robert M. Nelson, Jr., C. Thomas Statton and Robin K. St. Clair, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1722-1730.

Planning Intricate Robot Motions to Remove Natural Materials, Sudheer M. Apte and Irving J. Oppenheim, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed. 1994), p.106-114

ed. and Paul R. Klarer, ed., 1994), p106-114.

Plans for Managing High Level Waste at the Savannah
River Site, N. A. Sheikh and S. R. Salaymeh, (High
Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p10371047.

Precepts of Project Management, David J. Kerkes, CE Sept. 94, p70-72.

Process of Planning During Construction, Dora Cohenca-Zall, Alexander Laufer, Aviad Shapira and Gregory A. Howell, CO Sept. 94, p561-578.

Recreating a Process: The West Georgia Regional Water Supply Plan, Ken Hall, David Vaughn and Jim Cooley, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), 2403-406

Reoperation of Existing Reservoirs to Serve Changing Needs: Observations on Institutional Inertia, Conflict, and Efficiency, Douglas P. Gillingham, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p565-568.

Road-Maintenance Planning Using Genetic Algorithms. 1: Formulation, W. T. Chan, T. F. Fwa and C. Y. Tan, TE Sept./Oct. 94, p693-709.

Road-Maintenance Planning Using Genetic Algorithms. II: Analysis, T. F. Fwa, C. Y. Tan and W. T. Chan, TE Sept./Oct. 94, p710-722.

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Space Exploration: Getting a Handle on "Why?", Gordon R. Woodcock, Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p960-968.

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Technologies for Planning Railroad Track Maintenance and Renewal, Donald Uzarski and Sue McNeil, TE Sept./Oct. 94, p807-820.

Three-dimensional Modeling for Improving Construction Process Performance, Amarjit Singh, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1156-1163.

Toward Integrated Models for Structural Design, Namhee K. Hong and Richard Sause, (Computing in Civil Engineering, Khalii Khozeimeh, ed., 1994), p1310-1317.

neering, Khalii Khozeimeh, ed., 1994), p1310-1317.
Using Knowledge Based Systems for Training the Young Engineer, James Crum and Michael Mulvihill, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1286-1293.

Using Planning Scenarios for DOE Radioactive Waste Management: The Case of the Advanced Neutron Source, David Lewis Feldman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1696-1703

Visitor Usage Analysis as Basis for Marina Expansion, William E. McCleish and John C. Corrough, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p597-604.

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How to Optimize Frames Using Plastic Design Concept, Shahram Pezeshk, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p113-122.

Notional-Load Plastic-Hinge Method for Frame Design, J. Y. Richard Liew, D. W. White and W. F. Chen, ST May 94, p1434-1454.

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New Modulus of Soil Reaction - E' Values for Buried Thermoplastic Pipe Design, Jey K. Jeyapalan and Peggy A. Jaramillo, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p.239-260.

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Rate Dependent Plasticity and Damage for Concrete, V. P. Panoskaltsis, J. Lubliner and P. J. M. Monteiro, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p27-40.

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for Soil, Roger S. Crouch, John P. Wolf and Yannis F. Dafalias, EM Nov. 94, p2251-2270. Vibration of Foundations on Incompressible Soils with No Elastic Region, Ronaldo I. Borja and Wen-Hwa Wu, GT Sept. 94, p1570-1592.

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Design Basis for Creep in Composites Structures, Richard E. Chambers and Ayman S. Mosallam, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p265-271

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Shear Design Guidelines for Polyester Concrete Using Re-Shear Design Guinelines for Forjester Confere Using Re-cycled Plastic, K. S. Rebeiz, S. P. Serhal and D. W. Fowler, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p821–826. Special Considerations in the Design of Connections for

Recycled Wood/Plastic Composite Lumber, George H. Kyanka, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p929-933.

Structural Behavior of Polymer Concrete Beams Using Recycled Plastic, Karim S. Rebeiz, Sleiman P. Serhal and David W. Fowler, MT Feb. 94, p150-165.

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1994), p1310-1315.

Dynamics of Laminated Plates with Layer Waviness, Raouf A. Raouf, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p109-115.

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Expandable Structures with Incorporated Roofing Elements, J. P. Valcárcel, F. Escrig and E. Martín, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p752-761.

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A Generalized Approach to the Local Stability of Stiffened Plates: Part II-Approximate Solution, Archibald Sher-bourne and Osama Bedair, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1532-1537

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ed., 1994), p89-98. Modelling of Extended Endplate Bolted Connections, Mohammed R. Bahaari and Archibald N. Sherbourne, (Structures Congress XII, N. C. Baker, ed. and Barry J.

Loodno, ed., 1994), p731-736.

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Postbuckling of Moderately Thick Circular Plates With Edge Elastic Restraint, G. Venkateswara Rao, N. Rajasekhara Naidu and K. Kanaka Raju, EM Oct. 94,

A Quasicrystal for Denmark's Coast, Tony Robbin, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994),

p1045-1052 Rectangular Thick Plate with Free Edges on Pasternak

Foundation, X. P. Shi, S. A. Tan and T. F. Fwa, EM May 94, p971-988.

Simple Semi-Loof Element for Analyzing Folded-Plate Structures, K. Y. Sze, EM Jan. 94, p120-134.

Stability Analysis of Stiffened Plates and Shells, U. Jäppelt and H. Rothert, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p917-926.

Stability of Skew Mindlin Plates under Isotropic In-Plane Pressure, C. M. Wang, S. Kitipornchai, Y. Xiang and K. M. Liew, EM Feb. 93, p393-401.

Temperature Effects on Rigid Pavements, I. E. Harik, P. Jianping, H. Southgate and D. Allen, TE Jan./Feb. 94,

p127-143

Topology Optimization of Plate and Shell Structures, K. Maute and E. Ramm, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p946-955. Vibration of Mindlin Plates on Point Supports Using Con-

straint Functions, K. M. Liew, Y. Xiang, S. Kitipornchai and M. K. Lim, EM Mar. 94, p499-513.

Water Waves Above Submerged Porous Plate, Xiping Yu and Allen T. Chwang, EM June 94, p1270-1282. Wave Scattering by Submerged Porous Disk, Allen T. Chwang and Jianhua Wu, EM Dec. 94, p2575-2587.

Platforms

Environmental Hardening of a Mobile-Manipulator System for Nuclear Environments, Sammy L. Jones, Timothy Cable, James S. Tulenko, Stoyan Toshkov and Fred R. Sias, Jr., (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p296-303.

For Hospital, Nowhere to Go but Up, CE Apr. 94, p16,19.

An Intelligent Robotic Vehicle for Lunar/Martian Applications, Fei-Yue Wang, Michael Marefat, Paul J. A. Lever and Larry Schooley, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p193-201.

A Mobile System for the Remote Assembly of Planetary Structures, P. T. Boissiere, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer,

ed., 1994), p278-285.

An Overview of the Accident Response Mobile Manipula-tion System (ARMMS), W. D. Morse, D. R. Hayward, D. P. Jones and A. Sanchez, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p304-310.

A Stewart Platform Lunar Rover, Roger Bostelman, James Albus, Karl Murphy, Tsung-Ming Tsai and Ed Amatucci, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p175-183.

Plumbing fixtures

Effectiveness of Retrofit in Multi-Family Apartments, Roger Durand, Richard C. Allison and Judith Durand, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p412-415.

Water Chemistry of Lead Corrosion Control, Leland L.
Harms, Jonathan A. Clement and Michael R. Schock, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p34-

Plumes

Fate/Transport Modeling and Remediation of Contaminated Plume at Vance Airforce Base, Avdhesh K. Tyagi and Sharon H. Carpenter, (Hydraulic Engineering George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p287-292.

Groundwater Remediation at a Superfund Site, Henry Y. He, Jing-Yea Yang and Gregory Powell, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p.282-286.

A Lagrangian Model for Surface Buoyant Jets, Maneesha Joshi and J. F. Atkinson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p487-491.

Modeling Ecological Impacts of Destratification, S. Geoffrey Schladow, David P. Hamilton and Murray C. Burling, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1321-

Modeling of Deep Water Outfall Plumes in the East Australian Coastal Ocean, Ian P. King, William L. Peirson and Bruce A. Cathers, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p71-85.

Physical-Based Numerical Model of Inclined Starting Plumes, Juichiro Akiyama, Masaru Ura and Wei Wang,

HY Oct. 94, p1139-1158.

Puckette, Paul, Michael Tubman and Blair Brumley, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p86-95.

Air Entrainment and Bubble Behavior in Plunge Pools, Boualem Hadjerioua, Emmett M. Laursen, Margaret S. Petersen and Tony A. Rizk, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p989-993.

Comparison of Headcut Advance Testing and Soil Test Results, Gregory J. Hanson and Robinson. Kerry M., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p426-430.

Estimation of Spillway Free Jet Trajectory Lengths, Peter J. Rae and Diana Hurdowar-Castro, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p421-425

Force and Pressure Measurements in Spillway Plunge Pools, Peter J. Rae, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p553-557.

High-Resolution Measurements of Sand Suspension by Plunging Breakers in a Large Wave Channel, William R. Dally and Stephen F. Barkaszi, Jr., (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p263-277.

Hydraulic Design of Spillway Plunge Pool Linings, Peter J. Rae, (*Hydraulic Engineering* '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p396-400.

Plunge-Pool Scour by Inclined Jets, Assem M. Afify and Gilberto E. Urroz, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1040-1044.

Sediment Concentration below Free Overfall, O. R. Stein and P. Y. Julien, HY Sept. 94, p1043-1059.

Pneumatic systems

Demonstration of Pneuma Dredging Technology, Giovanni Faldi and Timothy L. Gahring, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1047-1049.

Helium-Supported Hangar for a Small Solar-Powered Airship, Rosemarie Wagner and Bernd Kröplin, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p592-601.

Large-Scale Loading Tests of Shallow Footings in Pneumatic Caisson, Osamu Kusakabe, Yoshito Maeda and Masatoshi Ohuchi, GT Nov. 92, p1681-1695.

Pneumatic Conveying of Materials at Partial Gravity, Thomas A. Sullivan, Elissa Koenig, Christian W. Knudsen and Michael A. Gibson, AS Apr. 94, p199-208.

Results of Air-Permeability Testing in a Vertical Borehole at Yucca Mountain, Nevada, G. D. LeCain and J.N. Walker, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2782-2788.

Study of Interaction Between Pneumatic Spherical and Cylindrical Form Shells Subjected to Wind Pressure, D. Beilin and V. Polyakov, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1082-1093.

Point pollution

The Great Lakes Initiative: Dollars Down the Drain, Aleesa L. Bell and Fredric P. Andes, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), pl 10-120.

Poirot, James W.

ASCE Offers Options for Funding Atlanta's Infrastructure Renewal Program, NE Nov. 94, p1,3.

ASCE President Offers New Vision of Leadership, NE Jan. 94, p1.

Philippine President Ramos Becomes ASCE Honorary Fellow, NE Sept. 94, p15.

Plaudits for Poirot (1tr), CE Feb. 94, p32.

Poirot Calls for Synergy at Composites Conclave in Cincinnati, CE Apr. 94, p72,74.

Professional Development? Raise Salaries (1tr), CE Feb. 94, p32,35.

Virginia Office Building to Be ASCE's New International Headquarters, NE Oct. 94, p1.

Water Engineers Challenged to Take Lead on Sustainable-Development Track, CE Aug. 94, p64.

Poisson ratio

Finite Element Modeling of Concrete Expansion and Confinement, F. J. Vecchio, ST Sept. 92, p2390-2406.

Poisson Effect in Extensive Cables with Both Ends Fixed, John V. Huddleston and Hee-Jung Ham, EM July 94, p1590-1595.

Poland

Poland Gets Moving, Jeff Austin, WP Special issue 94, p35-38.

Poles

ASCE GUIDE for Design of Guyed Transmission Structures, Alain H. Peyrot, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p613-617.

Buckling Strength of Wood Power Poles Using Finite Elements, A. B. Peabody and J. W. Wekezer, ST June 94, p1893-1908.

Guide for the Design of Prestressed Concrete Poles, William Y. Ford, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p591-596.

How Tall Transmission Poles Survived Hurricane Andrew, Kou-Roung Chang, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p377-386.

Hurricane Andrew Induced Damage to Florida Power & Light's Transmission System, C. Jerry Wong, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p387-396. Performance of Spun Prestressed Concrete Poles During Hurricane Andrew, Fouad H. Fouad, Norman L. Scott Elizabeth Calvert and Michael Donovan, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p362-376.

Role of Vortex-Excited Vibrations in Damage to Power Poles in Hurricane Andrew, Richard A. Skop and Ahmad H. Namini, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p567-576.

Utility Pole Can Be Installed By Hand or Helicopter, CE

May 94, p94.

Policies

Analyzing Mass Perceptions of Nuclear Politics: Puzzling Over Trust, Hank C. Jenkins-Smith, Deborah A. Pratt and Gilbert W. Bassett, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p131-135.

Clearing the Air with Japan, Germany, CE Feb. 94, p8.

Colorado River Decision Support System, Larry Brazil and Ross Bethel, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p307-310.

Effects of Policy and Other Changes on Transuranic Waste Disposal at WIPP, Robert H. Neill and Lokesh Chaturvedi, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p280-284.

EPA Orders National Strategy on Sewer Overflows to Ease Water Pollution, NE Aug. 94, p15.

Federal Risk Management Policy: Where Are the Problems? Anthony J. Thompson, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), pl-18.

Federal Risk Management Policy: Where Is the Federal Government Heading? Where Are the Problems? Jonathan W. Bulkley, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p331-337.

Future Launch Systems: The Policy Challenge, Matthew A. Bille, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1452-1461.

A Gaming Analysis of Drought-Coping Policy Options, James L. Henderson, William B. Lord and Russell L. Gum, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p620-623.

Global-Climate Model, ET Aug./Sept. 94, p11.

Growing Interest, Growing Programs, Growing Pains: Successfully Customizing Public Outreach, Mindy Wadkins, Carleen Hill and Theresa Hirsch, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p232-237.

High Performance Construction Materials and Systems: An Essential Program for America and Its Infrastructure - Technical Report, Report 93-5011, Civil Engineering Research Foundation, 1993, 0-87262-939-2, 205pp.

High-Performance Construction Materials and Systems: An Essential Program for America and Its Infrastructure - Executive Report, Report 93-5011.E, Civil Engineering Research Foundation, 1993, 0-87262-938-4, 32pp.

Infrastructure: a More Comprehensive Policy is Needed, Neil S. Grigg, El Apr. 94, p183-192.

Instream Flow Policy: An Alternative to Minimum Flowby, Donald R. Jackson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p222-225.

Instream Flow Strategies for Operation of the Federal Central Valley Project, Serge Birk, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p315-318.

Minority Contractors: Framework for New Policy Development, Zuhair El-Itr and Roozbeh Kangari, CO Sept. 94, p632-648.

Mixed-Use Business Park Developments in Space: A Real-Estate Paradigm, Charles J. Lauer, Joseph P. Hopkins, Hugh M. Kelso, Brent Sherwood and Dana G. Andrews, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1471-1481.

Policy Issues Related to Replacement of Fish Screens at Glenn-Colusa Intake, Michael R. Stansbury, (Water Policy and Management: Solving the Problems, Darrell G.

Fontane, ed. and Harry N. Tuvel, ed., 1994), p153-156.
Public Involvement in Water Resources Management,
James W. Vearil, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N.

Tuvel, ed., 1994), p445-448.

Secretary of Energy Review of the Civilian Radioactive Waste Management Program, Christopher A. Kouts, Allen B. Benson and Patricia Van Nelson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p9-12. Space Policy: Key Points of International Law, Victor Tim-

mons and Teresa Laguatan, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed. 1994), 815-819.

Thoughts of Reservoir Management Studies, Morris Israel,

Kenneth W. Kirby and Jay R. Lund, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p238-241.

Water Policy Change, Implications for Pyramid Lake, John W. Fordham, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuv-

el, ed., 1994), p501-504. What's Science Got To Do With It?: The Use of Public Opinion in Developing Nuclear Waste Policy, Eric B. Herzik and John L. Dobra, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p112-120.

Political constraints

Earning Empowerment From Stakeholders, Peter T. Johnson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994). p258-262.

Political factors

Analyzing Mass Perceptions of Nuclear Politics: Puzzling Over Trust, Hank C. Jenkins-Smith, Deborah A. Pratt and Gilbert W. Bassett, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p131-135.
Changing Conditions and Water Elections, Charles H.
Lawrance, James M. Stubchaer and Jon A. Ahlroth, WR

July/Aug. 94, p458-475.

Conflict Between Professionalism and Political Responsiveness, Robert W. Brannan, El Jan. 94, p36-40.

Engineers and Leadership: How to Move up "Economic Food Chain", Richard G. Weingardt, El Jan. 94, p50-57. The Fleets of San Francisco Crippled by Phony Science, Wm. P. Boland, Jr., (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p162-169.

Hydrodiplomacy on Forester Creek, Lisa T. M. Vomero-Inouye, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel,

ed., 1994), p557-560.

Labor-Political Factors for International Firms in Develop-ing Regions, Enno "Ed" Koehn and Frank Atuahene, El

Jan. 94, p41-49.

Nuclear Arms Reduction, Nuclear Proliferation and High-Level Radioactive Waste Management, Daniel B. Bullen and James M. McCormick, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p30-39. The Politics of Nuclear-Waste Disposal, Paul Tarricone,

CE Mar. 94, p56-58.

Roiled Waters: Water Politics in the 1990s, Teresa Austin, CE July 94, p49-51.

Pollutants

Application of WQMAP to Upper Narragansett Bay, Rhode Island, J. C. Swanson and D. L. Mendelsohn, (Estuarine and Coastal Modeling III, Malcolm L. Spauldng, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p656-678.

Comparison of Eulerian-Lagrangian, Random Walk and Hybrid Methods of Modeling Pollutant Transport, Jeffrey C. Moeller and E. Eric Adams, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and

Craig Swanson, ed., 1994), p609-623.
Computer Aided Design of Trickling Filters, Bruce E. Logan, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p678-685.

Coping with EPA's Transportation Storm Water Permit, James P. Amick, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1219-1223

Different Methods to Compute Pollutant Dispersion Around Buildings, R. Panneer Selvam and Alan H. Huber, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p92-98.

Does Current Cancer "Risk Assessment" Harm Health? Bruce N. Ames, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard

Holme, ed., 1994), p121-122.

Dry Weather Stormwater Management - Yakima, WA, John R. Genskow, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry

N. Tuvel, ed., 1994), p123-126.

Effects of Molecular Oxygen and pH on the Adsorption of Aniline to Activated Carbon, Peter Fox and Kamalesh Pinisetti, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p617-623.

Field Test of Stormwater Best Management Practices, S. L. Yu, S. L. Barnes, R. J. Kaighn, Jr. and S. L. Liao, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p508-515.

An Integrated Shell (ROSS3) for Transport Modeling, Visualization, and Data Management, Keerthisiri S. Angam-mana, Poojitha D. Yapa and Hung Tao Shen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p150-154. Investigation of Dry-Weather Pollutant Entries Into

Storm-Drainage Systems, Richard Field, Robert Pitt, Melinda Lalor, Michael Brown, William Vilkelis and Edward Phackston, EE Sept./Oct. 94, p1044-1066.

A model to describe the fate of agricultural pollutants, Pinheiro and B. Caussade, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p170-174.

Modeling Hydrologic and Pollutant Transport Processes for Stromwater Runoff to Surface Waters, Leslie L. Shoemaker, Mohammed Lahlou, Andrew Stoddard and James Pagenkopf, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1208-1212.

Modeling Pollutant Fate and Transport in Constructed Wetlands, Russell T. Brown, Joanne Field, Michael J. Zanoli and Ron W. Crites, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p532-539.

A molecular Solution to Radioactive Waste, ET Dec. 94/Jan. 95, p11.

Near Field Behavior of a Far Field Circulation Model, Xueyong Zhang, Eric Adams, Alan Blumberg, Z. G. Ji and Kirk Ziegler, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p155-159.

NPDES Storm Water Permit Compliance at Air Force Installations, Paul Makowski and Marvin Smith, (Hydraustatations, Fau Makowski and Marvill Simul, (17)drud-lic Engineering '94', George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1224-1228. SEASHELL - Software for the Simulation of Transport and

EASTIELL - Software for the Simulation of Pransport and Fate of Pollutants in Coastal Waters, Venkat S. Kolluru and Malcolm L. Spaulding, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p624-640.

The Sensitized Photocatalysis of a Mixed Reactant System of 4-Chlorophenol and 4-Nitrophenol, Melissa S. Dieckmann, Kimberly A. Gray and Prashant V. Kamat, (Criti-cal Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p726-732

Sizing Stormwater Detention Basins for Pollutant Remov-al, G. V. Loganathan, E. W. Watkins and D. F. Kibler, EE Nov./Dec. 94, p1380-1399.

Source-Receptor Modeling of PAHs Using Deposition Levels in Winter-Long Urban Snowpack, M. Sharma, E. McBean, N. Thomson and J. Marsalek, EE Sept./Oct. 94, p1248-1265.

Stormwater Regulation: The Local Perspective, Doug Har-rison, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme,

ed., 1994), p177-186.

Utilizing Mathcad for Hydraulic Design of Stormwater Pump Stations, T. Chris Evensen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p814-821.

Applications of Optimal Hydraulic Control to Ground-Water Systems, David P. Ahlfeld and Manoutchehr Heidari, WR May/June 94, p350-365.

A Hybrid Algorithm for Radionuclide Estimation, E. A. Yfantis, G. T. Flatman and F. S. Makri, (*High Level Radioactive Waste Management*, High Level Radioactive Waste Program Committee, 1994), p2063-2068. The World is Coming to an End: E. B. Rice Memorial, William L. Ryan, CR Sept. 94, p87-92.

Pollution abatement

Identifying Promising Pollution-Prevention Technologies, James D. Englehardt, EE May/June 94, p513-526.

Mitigation of Non-Point Source Pollution Impacts on Groundwater Aquifers: A Case Study, Erez Sela, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p246-249

Remediation of Contaminated Soils by Solvent Flushing, Remediation of Contaminated Solis by Solvent Flushing,
 Denie C. M. Augustijn, Ron E. Jessup, P. Suresh C. Rao and A. Lynn Wood, EE Jan./Feb. 94, p42-57.
 Restoration of Lakes and Canals in an Urban Park - Belle

Isle, Michigan, Catherine Riseng, Douglas Denison and Bernard Fekete, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p261-270.

Wet Detention Facility Pollutant Removal Modeling, Thomas R. Sear and Herbert M. Raybourn, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p830-833.

Pollution control

ASCE Urges Passage of Bills on Pollution Control and Earthquake Hazards Reduction, NE July 94, p2. Clean Water Act Reauthorization: The States' Perspective,

Roberta Haley Savage, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p34-52.

Computer-Integrated Construction, Bruce C. Coles and Kenneth F. Reinschmidt, CE June 94, p50-53.

A Decision Support System for Nonpoint Source Pollution Management Using a Distributed Model-GIS-DBMS Linkage, Jaewan Yoon and G. Padmanabhan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

Environmental Technology Management of the Cement In-dustry in India and Neighbouring Countries, A. K. Chat-terjee, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994),

The Great Lakes Initiative: Dollars Down the Drain, Aleesa L. Bell and Fredric P. Andes, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p110-120.

The Light at the End of the Sewer: How Interested Parties Negotiated a Consensus Solution to the Combined Sewer Overflow Problem, David S. Bailey, (National Water Resources Regulation: Where is the Environmen-tal Pendulum Now?, Howard Holme, ed., 1994), p204-

Regulation of Nonpoint Sources, William Whipple, Jr., (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p198-203.

Restoring the Everglades, James Best Jackson, Larry Fink and Gary Goforth, CE Mar. 94, p52-55.

SEPA's Super Water-Treatment Project Takes Top ASCE

Prize for 1994, NE May 94, pl.
Storm Water Pollution Control for Industry: Developing Effective Guidelines Through Public Involvement, L. Donald Duke, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p517-520.

Polyethylene

480

Automation Concepts for In-Situ Waste Containment, Lar-ry Banta and David Martinelli, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p448-456.
Construction Use of Polyester Composite Using Recycled

PET, Karim S. Rebeiz, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994),

p80-87

Failure of Large Diameter High Density Polyethylene Sewer Pipe a Case in Point, Jey K. Jeyapalan and Joe A. Conner, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p356-371.

Flow Capacity of Rehabilitated Sanitary Sewers, Kenneth K. Kienow, Karl E. Kienow and Paul E. Kienow, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p28-42.

Hydraulic Analysis of an HDPE Water Supply Pipeline, Yifan Zheng and Adnan M. Alsaffar, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p318-328.

Interface Shear-Strength Properties of Roughened HDPE, Marc E. Orman, GT Apr. 94, p758-761.

Practical Seepage Control in Existing Tunnels, J. Samuel Vance, Daniel J. Hurst and C. T. Goewey, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p888-895.

Reinforcing Sand With Strips of Reclaimed High-Density Polyethylene, Craig H. Benson and Milind V. Khire, GT

May 94, p838-855.

Round Rock Dam, Outlet Works Modification, Bruce D. Feinberg, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p411-423.

Thermal Qualification Testing of Efficient Neutron Shield Materials, Richard H. Boonstra, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p765-771.

Thermoplastic Stabilization of MSW Combustor Ash, Vin-cent T. Breslin and Shawn E. Tisdell, EE Jan./Feb. 94,

p154-168.

Use of Low Density Polyethylene to Modify Asphalt Mix-tures, Fouad M. Bayomy and Glenn D. Carraux, (Infra-structure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p303-310.

Polygons

Prisms and Antiprisms, Pieter Huybers and Gerrit van der Ende, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p142-151.

Polymer concretes

Construction Use of Polyester Composite Using Recycled PET, Karim S. Rebeiz, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p80-87.

Shear Design Guidelines for Polyester Concrete Using Recycled Plastic, K. S. Rebeiz, S. P. Serhal and D. W. Fowler, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p821-826.

Structural Behavior of Polymer Concrete Beams Using Recycled Plastic, Karim S. Rebeiz, Sleiman P. Serhal and

David W. Fowler, MT Feb. 94, p150-165.

Test for Polymer Overlay Interface on Concrete, Brian M. Deming, Haluk Aktan and Mumtaz Usmen, (Infrastruc-ture: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p709-715.

Activated Carbon as a Catalyst for Polymerization of Phe-nolic Compounds, Jacob A. Bourdeau and Radisav D. Vidic, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p756-763.

Behavior of AC-20P Versus AC-30 Asphalt Concrete Mixtures, Peter Sebaaly, Imran Farooq and Jon Epps, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1059-1079.

CDR - A Chemical Solution to a Mechanical Problem, Gary E. Blizzard, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p172-181.

The Chemistry of MDF Materials, M. R. Silsbee and D. M. Roy, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p193-209.

Colloidal Fouling of Reverse Osmosis Membranes, Menachem Elimelech and Xiaohua Zhu, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p329-335.

Impulsive Punching of Fiber-Reinforced Concrete Slabs, Pietro G. Gambarova and Cristiano Schumm, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p252-257.

Montana Experience with Polymer Modified Asphalt, Murari Man Pradhan and Joseph D. Armijo, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p311-318.

New Directions for Cement-Based Materials, J. Francis Young, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p610-611.

Optimization of Concrete Drying Temperature for Monomer Impregnation, I. L. Al-Qadi, R. E. Weyers and T. Dutta, MT Feb. 94, p54-64.

Performance Summary of the Tanque Verde Project-Geogrid Reinforced Soil Retaining Walls, James G. Collin, Donald G. Bright and Ryan R. Berg, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p43-56.

Perimeter Load Transfer in Model Drilled Shafts Formed under Slurry, R. E. Majano, M. W. O'Neill and K. M. Hassan, GT Dec. 94, p2136-2154.

Polymer Cement Composite - A Critical Review, Satish Chandra, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p15-36.

Surface Preparation of Steel for Adhesive Bonding in Rehabilitation Applications, Steven H. McKnight, Pierre E. Bourban, John W. Gillespie, Jr. and Vistasp M. Karbhari, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), pl 148-1155.

Thermal Qualification Testing of Efficient Neutron Shield Materials, Richard H. Boonstra, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p765-771.

Treatment of Oil in Water Emulsions by Ceramic-Supported Polymeric Membranes, Robert P. Castro, Yoram Cohen and Harold G. Monbouquette, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p82-89.

The Use of ETFE Foils in Lightweight Roof Constructions, Craig Schwitter, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p622-631.

Use of Low Density Polyethylene to Modify Asphalt Mixtures, Fouad M. Bayomy and Glenn D. Carraux, *(Infra-structure: New Materials and Methods of Repair*, Kim D. Basham, ed., 1994), p303-310.

Polynomials

Common Misconceptions about Neural Networks as Approximators, William C. Carpenter and Jean-Francois Barthelemy, CP July 94, p345-358.

Comparison of Simple and Chebychev Polynomials in Rayleigh-Ritz Analysis, Sarvesh Singhvi and Rakesh K. Kapania, EM Oct. 94, p2126-2135.

Conservative Characteristics-Based Schemes for Mass Transport, C. W. Li and T. S. Yu, HY Sept. 94, p1089-1099

Pointwise Equilibrating Polynomial Element for Nonlinear Analysis of Frames, Siu Lai Chan and Zhi Hua Zhou, ST June 94, p1703-1717.

Polyolefin

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Composite Sorption of Pure Vapors on Polyolefins, Carbon, and Minerals, Benito J. Mariñas and Ren-An Li, EE Sept./Oct. 94, p1207-1229.

Polystyrene

Polystyrene Blocks Support Sinking Roadway, CE Oct. 94, p86.

Thermoplastic Stabilization of MSW Combustor Ash, Vincent T. Breslin and Shawn E. Tisdell, EE Jan./Feb. 94, p154-168.

Polyvinyl chloride

The Danby Pipe Renovation System, George McAlpine, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), pl44-158.

Headloss Analysis for Modern Piping Systems, L. Gregg Horn, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p10-27.

Specification Contract Effects on Hydraulic Designs, Jeff Baysinger and Leo Kinney, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p152-158.

Pomeroy, Richard D.

Richard Pomeroy, 88, Dies; Known for Work on Hydrogen Sulfide in Sewage, NE Feb. 94, p11.

Ponding

Horton Infiltration Equation Revisited, A. Osman Akan, IR Sept./Oct. 92, p828-830.

Pond

Joint Pond-Wetland System Performance in Colorado, Ben Urbonas, Bao Vang and Jay Carlson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p384-387.

Modeling a Ponded Infiltration Experiment at Yucca Mountain, NV, David B. Hudson, Alan L. Flint and William R. Guertal, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee. 1994). p.2168-2174.

Pools

Air Entrainment and Bubble Behavior in Plunge Pools, Boualem Hadjerioua, Emmett M. Laursen, Margaret S. Petersen and Tony A. Rizk, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p989-993.

Force and Pressure Measurements in Spillway Plunge Pools, Peter J. Rae, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p553-557.

Hydraulic Design of Spillway Plunge Pool Linings, Peter J. Rae, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p396-400. A Mechanism of Pool Formation and Maintenance in For-

A Mechanism of Pool Formation and Maintenance in Forest Streams, Richard D. Smith and Robert L. Beschta, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p824-828.

Plunge-Pool Scour by Inclined Jets, Assem M. Afify and Gilberto E. Urroz, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1040-1044.

Step-Pool Streams: An Adjustment to Maximum Flow Resistance, Athol D. Abrahams, Gang Li and Joseph F. Atkinson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p815-816.

Population growth

Assessing Nassau County's Water Conservation Program, Mark Maimone and Michael Labiak, WR Jan./Feb. 94, p90-100.

The Case for Southern Nevada's Thirst, G. C. K. Grinnell, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p319-322.

Fort Bend County Surface Water Supply Study, Martha F. Juch and David E. Winslow, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p214-217.

Recreating a Process: The West Georgia Regional Water Supply Plan, Ken Hall, David Vaughn and Jim Cooley, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p493-496.

Population statistics

Emergency Response Preparedness Analysis for Radioactive Materials Transportation, Emelinda M. Parentela, Shashi K. Sathisan, Sandeep S. Burli and Walter C. Vodrazka, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1249-1254.

Population Estimation Techniques for Routing Analysis, Shashi K. Sathisan and Anil K. Chagari, (High Level Radioactive Waste Management, High Level Radioactive

Waste Program Committee, 1994), p658-665.

Pore pressure

Analysis of Foundation Settlement Due to Earthquake, Jian Zhou and Jian Du, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p798-805.

Calibration Chamber Studies of Piezocone Test in Cohesive Soils, P. U. Kurup, G. Z. Voyiadjis and M. T.

Tumay, GT Jan. 94, p81-107.

Consolidation Settlements and Pore Pressure Dissipation, Demetrious C. Koutsoftas and Raymond K. H. Cheung, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1100-1110.

Deformation of Sand Foundations Induced by Earth-quakes, Xiangwu Zeng, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p726-739.

Downdrag on Piles: Review and Recent Experimentation, John Anthony Little, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1805-1826.

Dynamic Green's Functions of Homogeneous Poroelastic Half-Plane, T. Senjuntichai and R. K. N. D. Rajapakse, EM Nov. 94, p2381-2404.

Gas in Soils II: Effect of Gas on Undrained Static and Cyclic Strength of Sand, Nader S. Rad, Antonio J. D. Vianna and Toralv Berre, GT Apr. 94, p716-736.

Post-Cyclic Consolidation Behavior of Loose Sands, J. C. Chern and C. C. Lin, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p740-747

Postcyclic Undrained Strength for Cohesive Soils, Kazuya Yasuhara, GT Nov. 94, p1961-1979.

Procedures for Elastoplastic Liquefaction Modeling of Sands, A. Anandarajah, EM July 94, p1563-1587.

Replacement of a Failed Embankment Designed to Accommodate Large Settlement: A Case Study, B. Kent Merritt and Gary M. Wantland, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p364-375.

Vibratory Mobilization of Immiscible Liquid Ganglia in Sands, Lakshmi N. Reddi and Sreedhar Challa, EE Sept./Oct. 94, p1170-1190.

Pore pressure measurement

Hydraulic Conductivity Assessment of Slurry Wall Using Piezocone Test, M. Manassero, GT Oct. 94, p1725-1746.

Performance of Nanhua Dam During Construction, Hsien-Chang Kao and Jin-ching Chern, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p417-425

Rate of Settlement of Silt Alluvium at Trojan, Derek H. Cornforth, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1460-1471.

Pore size distribution

Effect of Heat Treatment on Strength of Clays, R. C. Joshi, Gopal Achari, D. Horsfield and T. S. Nagaraj, GT June 94, p1080-1088.

Estimation of the Thickness of Transition Zone in Concrete and Characteristics of Transition Zone in High-Strength Concrete, Hiroshi Uchikawa, Shunsuke Hanehara and Daisuke Sawaki, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p616.
The Role of Shale Pores in Settlement, Luis E. Vallejo, Mi-

chael K. Robinson and Ann C. Stewart-Murphy, (Verti-cal and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1425-1434.

Pore water

Chemical Flux of Pore Water Through Sediment Caps, Peggy Murray, Drew Carey and Thomas J. Fredette, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1008-1016.

Analysis of Site Liquefaction Using Earthquake Records, Mourad Zeghal and Ahmed-W. Elgamal, GT June 94, p996-1017.
Behavior of Pressure Tunnels and Guidelines for Liner De-

sign, Gabriel Fernández, GT Oct. 94, p1768-1791.

Consolidation of Clay Layer: Hydrogeologic Boundary Conditions, Robert L. Schiffman, John M. McArthur and Robert E. Gibson, GT June 94, p1089-1093. Cyclic Threshold Shear Strains in Soils, Mladen Vucetic.

GT Dec. 94, p2208-2228.

The Dredging Research Program Technical Area 3, William D. Martin, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p11-17.

Performance of Embankment Stabilized with Vertical Drains on Soft Clay, B. Indraratna, A. S. Balasubramaniam and P. Ratnayake, GT Feb. 94, p257-273.

Piezometer Performance at Wildlife Liquefaction Site, California, T. Leslie Youd and Thomas L. Holzer, GT June 94, p975-995.

Postearthquake Deformation Analysis of Wildlife Site, W. H. Gu, N. R. Morgenstern and P. K. Robertson, GT Feb. 94, p274-289.

Seepage-Induced Effective Stresses and Water Pressures Around Pressure Tunnels, Gabriel Fernández and Tirso A. Alvarez, Jr., GT Jan. 94, p108-128.

A Technique to Perform Coupled Consolidation Analysis Using Two Independent Softwares, Jichun Sun, Harianto Rahardjo and Delwyn G. Fredlund, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p849-856.

Analysis of Flow Along Anisotropic Fractures in Partially Saturated Media, J. S. Y. Wang and B. L. Cox, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1915-

Analytical Solutions for Harmonic Wave Propagation in Poroelastic Media, Chris Zimmerman and M. Stern, EM

Oct. 94, p2154-2178.

Chloride Diffusivity Computation for Cement Paste, E. J. Garboczi and D. P. Bentz, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p159-173.

Cross-Shore Sand Transport Under Random Waves at SU-PERTANK Examined at Mesoscale, Magnus Larson and Nicholas C. Kraus, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p204-219.

Dynamic Green's Functions of Homogeneous Poroelastic Half-Plane, T. Senjuntichai and R. K. N. D. Rajapakse,

EM Nov. 94, p2381-2404.
Estimating Air Conductivity and Porosity from Vadose-Zone Pumping Tests, Joel W. Massmann and Mark Mad-

den, EE Mar./Apr. 94, p313-328.

Fracture-Matrix Interaction in Topopah Spring Tuff: Ex-periment and Numerical Analysis, Robert J. Glass, Vince C. Tidwell, Alan L. Flint, William Peplinski and Yvette Castro, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1905-1914.

Influence of Surface Finish on Sorptivity on Concrete, W.

J. McCarter, MT Feb. 93, p130-136.

Kinetics of SO₂-Dolomite Reaction: Application of Ran-dom Pore Model, Sanjeev S. Tambe, Srinivas S. Yer-rapragada and K. L. Gauri, MT Feb. 94, p65-77.

483

Li, Qizhi, Richard A. Schultz, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p2106-2111.

Microstructure of the Paste - Aggregate Interface, Includ-ing the Influence of Mineral Additions, J. P. Ollivier and M. Massat, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p175-185.

New Formulation for Elastic Modulus of Fiber-Reinforced, Quasibrittle Matrices, Jamil M. Alwan and Antoine E.

Naaman, EM Nov. 94, p2443-2460.

Reflection and Transmission of Water Wave by Porous Breakwater, L. H. Huang and H. I. Chao, WW Sept./Oct. 92, p437-452.

Saturation Levels and Trends in the Unsaturated Zone, Yucca Mountain, Nevada, Philip H. Nelson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2774-2781.

Unsteady Drainage with Variable Drainage Porosity, Rajendra K. Gupta, Ashim K. Bhattacharya and Pitam Chandra, IR July/Aug. 94, p703-715.

Porous materials

Water Waves Above Submerged Porous Plate, Xiping Yu and Allen T. Chwang, EM June 94, p1270-1282

Wave Scattering by Submerged Porous Disk, Allen T. Chwang and Jianhua Wu, EM Dec. 94, p2575-2587.

Wave-Induced Oscillation in Harbor with Porous Breakwaters, Xiping Yu and Allen T. Chwang, WW Mar / Apr. 94, p125-144.

Porous media

Analytical Solutions for Harmonic Wave Propagation in Poroelastic Media, Chris Zimmerman and M. Stern, EM Oct. 94, p2154-2178.

Dispersivity in Heterogeneous Permeable Media, Dwayne A. Chesnut, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Commit-

tee, 1994), p1822-1841

Eccentric Settlements of a Rigid Foundation on a Consoli-dating Layer, Zhongqi Yue and A. P. S. Selvadurai, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p612-627.

Macroscopic Conductivities for Flow of Bingham Plastics in Porous Media, George C. Vradis and Angelos L. Pro-

topapas, HY Jan. 93, p95-108.

Mathematical Modeling of Saturated-Unsaturated Flow to Drains, Saleem Ahmad, Deepak Kashyap and B. S. Mathur, IR Jan./Feb. 93, p18-33.

Modeling Heretogeneous Unsaturated Porous Media Flow at Yucca Mountain, Thomas H. Robey, (High Level Ra-dioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2678-2684.

Moisture and Heat Flow in Concrete Walls Exposed to Fire, Jana Šelih, Antonio C. M. Sousa and Theodore W.

Bremner, EM Oct. 94, p2028-2043.

Seepage-Induced Effective Stresses and Water Pressures Around Pressure Tunnels, Gabriel Fernández and Tirso

A. Alvarez, Jr., GT Jan. 94, p108-128.

Studies of Non-Isothermal Flow in Saturated And Partially Saturated Porous Media, Clifford K. Ho, Kevin S. Maki and Robert J. Glass, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2481-2491.

Wave Interaction with Semiporous Cylindrical Breakwater, M. K. M. Darwiche, A. N. Williams and K.-H. Wang,

WW July/Aug. 94, p382-403.

Wave Motion Through Porous Structures, Xiping Yu and Allen T. Chwang, EM May 94, p989-1008.

Porous media flow

A Control Volume Finite Element Method for the Solution of 2-D Overland Flow Problems, P. Di Giammarco and E. Todini, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p82-101.

Macroscopic Conductivities for Flow of Bingham Plastics in Porous Media, George C. Vradis and Angelos L. Pro-

topapas, HY Jan. 93, p95-108.

Modeling Flow in Variably-Saturated Porous Media, S. P. Shrestha and G. V. Loganathan, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p429-432.

Nonlinearity and Free-Surface Flow, Nazeer Ahmed, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p327-331.

Permeability Measurements for the Modelling of Wave Action On and In Porous Structures, Marcel R. A. van Gent, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p671-

Stochastic Fluid Travel Times in Heterogeneous Porous Media, Wade E. Hathhorn and Randall J. Charbeneau, HY Feb. 94, p134-146.

Portland cements

Asphalt Portland Cement Concrete Composite: Laboratory Evaluation, I. L. Al-Qadi, H. Gouru and R. E. Weyers, TE Jan./Feb. 94, p94-108.

By-Product of Sulfur Recovery from Phosphogypsum as Concrete Aggregate, Amitava Roy, Gary R. Byerly and Roger K. Seals, MT Nov. 94, p439-452.

Control of Random Crack Formation in Portland Cement Concrete Pavements, Yeou-Shang Jenq and Sang-Chel Kim, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p972-977.

High-Performance Concrete Incorporating Large Volumes of ASTM Class F Fly Ash, A. Bilodeau and V. M. Malhotra, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994),

Hybrid Composite Beams: Analytical Modeling, S. A. Bhutta and I. L. Al-Qadi, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p178-190.

The Influence of Kiln Atmosphere on Clinker Characteris-tics, F. P. Sorrentino, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p65-78.

Measurement of Phase Compositions in Portland Cement Clinkers, F. Sorrentino, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p1-14.

Mechanical Properties, Microstructure and Durability of Portland Cement-Based Systems Containing Micro-Reinforcement, Norman M. P. Low, I. Gagnon and J. J. Beaudoin, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p200-216.

Mineral Admixtures in Cements for General Use and Special Purposes, Harold Roper, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L.

Sarkar, ed., 1994), p236-242.

Optimization of Concrete Drying Temperature for Mono-mer Impregnation, I. L. Al-Qadi, R. E. Weyers and T.

Dutta, MT Feb. 94, p54-64.

The Present State-of-the-Art of Immobilization of Hazardous Heavy Metals in Cement-Based Materials, David Bonen and Shondeep L. Sarkar, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p481-498.

Rebar Corrosion and Sulfate Resistance of Blast-Furnace Slag Cement, A. S. Al-Gahtani, Rasheeduzzafar and S. S. Al-Saadoun, MT May 94, p223-239.

Recycled Material, William A. Mallow, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p828-835.

Recycling Portland Cement Concrete Pavement at the Contractor's Option, Richard R. Reusser, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p86-91.

Service Life Prediction, ASR Deterioration, Toy S. Poole and G. Sam Wong, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p16-26.

Undersealing of Portland Cement Concrete Pavements: Does it Work? Ramzi Taha, Tom Papagiannakis and Ali Selim, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p163-169.

Use of Recycled Tire Rubbers in Concrete, Timothy D. Biel and Hosin Lee, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p351-358.

Utilization of Phosphogypsum-Based Slag Aggregate in Portland Cement and Asphaltic Concrete Mixtures, Paul T. Foxworthy, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p75-

Brief History of the Port of Sines and General Presentation of West Breakwater, Manuel Dinis C. Dias and Jeno F. Toppler, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p3-24.

Evaluations and Revisions of the Design, F. Abecasis and C. Pita, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of

ASCE, 1994), p302-326.

The Evolution of Breakwater Design, Billy L. Edge, Or-ville T. Magoon and William F. Baird, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p1024-1039.

Exemplary Plans of a Fisharina in Japan, Takeshi Kawagu-chi, Hideki Hata and Yasuhiro Yoshizuka, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p211-221.

Farakka Barrage - It's Impacts and Possible Mitigation, M. Asafuddowlah and Sufian A. Khondker, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p120-124.

Runiet, ed., 1994, p.120-124.

Fisharina Policies in Japan, Noboru Oshima, Sanji Kida, Motobumi Manabe and Nobuo Mikami, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p.201-210.

Following the Geotechnical Studies of the West-Breakwater at Sines; Hydro-Geotechnical Stability of

Breakwaters, Frans B. J. Barends and Jack Hagenaar, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p124-167.

Measurement and Analysis of Wave Data in Los Ange les-Long Beach Harbors, James Rosati, III and Paul T. Puckette, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994),

p223-235.

Molhe Oeste Do Porto De Sines Reabilitação Definitiva Fiscalização Da Construção, Joaquim da Silva Pinto, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p229-264.

The Navigation Data Center and Its Role in Dredging Management, Virginia R. Pankow, (Dredging '94, E.

Clark McNair, Jr., ed., 1994), p490-498.

Overview of the Sines West Breakwater Reconstruction, Orville T. Magoon, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p1-2.

Planning and Improvement of Coastal Area Utilization, Masatsugu Fukuya, Junji Tanaka, Shigeki Nakamura, Toshiya Taneichi and Hideyuki Kida, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and

Fred A. Klancnik, ed., 1994), p222-231.

Port of Sines West Breakwater Rehabilitation Repair Works (1990 - 1992), Carlo Alberto Segarelli, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p205-228.

Port of Sines West Breakwater Rehabilitation Strategy Selected, Manuel Dinis C. Dias, (Reconstruction of the lected, Manuer Dinis C. Dias, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p25-34. Protecção Provisória do Molhe Oeste do Porto de Sines, Fausto Gonçalves Henriques and Ismael Byscaia de Carvalho, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p35-53.

Short Synthesis of Some Studies Carried Out for the Repairing of Sines Port West Breakwater, G. Paolella and S. Corsini, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p70-98.

Sines Breakwaters Monitoring Program, C. Pita, F. Abecasis and A. Fernandes, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p408-427.

Sines West Breakwater Emergency Repair, Hydraulic Studies, H. Ligteringen, J. W. van der Meer and M. Rita, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p99-123.

Temporary Protection of the West Breakwater of the Port of Sines, Fausto Goncalves Henriques and Ismael Byscaia de Carvalho, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p54-69.

West Breakwater Maintenance, H. Ligteringen and Fernando A. S. Oliveira, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p428-439.

West Breakwater of the Port of Sines Final Rehabilitation Inspection of the Construction, Joaquim da Silva Pinto, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE. 1994), p265-301.

West Breakwater Rehabilitation and Construction Supervision, Fernando A. S. Oliveira and H. de Jong, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p327-407.

West Breakwater Sines Definitive Rehabilitation, General concept, H. Ligteringen, F. Silveira Ramos, J. W. van der Meer and M. Rita, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p168-186.

Brief History of the Port of Sines and General Presentation of West Breakwater, Manuel Dinis C. Dias and Jeno F. Toppler, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p3-24.

Evaluations and Revisions of the Design, F. Abecasis and C. Pita, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of

ASCE, 1994), p302-326.

Following the Geotechnical Studies of the West-Breakwater at Sines; Hydro-Geotechnical Stability of Breakwaters, Frans B. J. Barends and Jack Hagenaar, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p124-167.

Molhe Oeste Do Porto De Sines Reabilitação Definitiva Fiscalização Da Construção, Joaquim da Silva Pinto, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p229-264.

Overview of the Sines West Breakwater Reconstruction, Orville T. Magoon, (Reconstruction of the West Break-water at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p1-2.

Port of Sines West Breakwater Rehabilitation Repair Works (1990 - 1992), Carlo Alberto Segarelli, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway. Port, Coastal, and Ocean Division of ASCE, 1994), p205-228.

Port of Sines West Breakwater Rehabilitation Strategy Se-lected, Manuel Dinis C. Dias, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p25-34.

Protecção Provisória do Molhe Oeste do Porto de Sines, Fausto Gonçalves Henriques and Ismael Byscaia de Carvalho, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p35-53.

Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, (Orville T. Magoon, chmn.), 1994, 0-7844-0044-X, 443pp.

Short Synthesis of Some Studies Carried Out for the Repairing of Sines Port West Breakwater, G. Paolella and S. Corsini, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p70-98.

Sines Breakwaters Monitoring Program, C. Pita, F. Abecasis and A. Fernandes, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p408-427

Sines West Breakwater Emergency Repair, Hydraulic Studies, H. Ligteringen, J. W. van der Meer and M. Rita, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p99-123.

Temporary Protection of the West Breakwater of the Port of Sines, Fausto Goncalves Henriques and Ismael Byscaia de Carvalho, (Reconstruction of the West Breakwa-ter at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p54-69.

West Breakwater Maintenance, H. Ligteringen and Fernando A. S. Oliveira, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p428-439.

West Breakwater of the Port of Sines Final Rehabilitation Inspection of the Construction, Joaquim da Silva Pinto, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p265-301.

West Breakwater Rehabilitation and Construction Supervision, Fernando A. S. Oliveira and H. de Jong, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p327-407.

West Breakwater Sines Definitive Rehabilitation, General Concept, H. Ligteringen, F. Silveira Ramos, J. W. van der Meer and M. Rita, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p168-186.

Positioning

- A New Robotic System Concept for Automating Highway Maintenance Operations, S. E. Winters, D. Hong and S. A. Velinsky, (), p374-382.
- Survey and Alignment of Particle Accelerators and Trans-port Lines, Robert E. Ruland, SU Feb. 94, p11-24.

Post tensioning Construction of the Clark Cable-Stayed Bridge at Alton, Illinois, David Goodyear and Ralph Salamie, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p672-676.

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Design and Construction of Post-Tensioned Concrete Floor Systems, D. Kirk Harman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1403-1408

in Posttensioned Timber-Bridge Specimen, Richard M. Gutkowski, Patrick J. Pellicane and Jean-

François Kalin, ST Dec. 94, p3435-3455.

One Peachtree Center: Atlanta Georgia, Housh Rahimzadeh and M. Nasim Akhtar, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p164-169

Postbuckling behavior

Analysis of Composite Panels Using Newton's Method, Norman F. Knight, Jr., (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and

Operations in Space 19, Notice of Camoway, ed. and Stanley Lokaj, ed., 1994), p147-155. Collapse Load Calculated by Probability Based Analysis Compared to Full Scale Tower Test Results, Thien T. Do, Michael D. Miller, Leon Kempner, Jr., Troy D. Lyver and Wendelin H. Mueller, III., (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p48-59.

Lateral Postbuckling Analysis of Beam-Columns, A. Kounadis and G. I. Ioannidis, EM Apr. 94, p695-706.

Nonlinear Analysis of Stiffened Laminated Cylindrical Shells Using the Layerwise Theory of Reddy, M. Savoia and J. N. Reddy, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p127-136.

Postbuckling Behavior of Steel-Plate Shear Walls under Cyclic Loads, M. Elgaaly, V. Caccese and C. Du, ST

Feb. 93, p588-605.

Postbuckling of Moderately Thick Circular Plates With Edge Elastic Restraint, G. Venkateswara Rao, N. Rajasekhara Naidu and K. Kanaka Raju, EM Oct. 94, p2232-2238

Postbuckling Response of Doubly-Curved Shallow Panels Under Complex Loading Conditions, L. Librescu and M. Y. Chang, Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p116-126.

Unstiffened Strip Approach for Perforated Wall Studs, Thomas H. Miller and Teoman Pekoz, ST Feb. 94, p410-421.

Potable water

Alternative Disinfectants for Drinking Water Treatment, Benjamin W. Lykins, Jr., Wayne E. Koffskey and Kath-

Benjamin W. Lykins, Jr., Wayne E. Kotiskey and Kathleen S. Patterson, EE July/Aug. 94, p745-758.

Arsenic Removal by Manganese Greensand Filters, Thon Phommavong and T. Viraraghavan, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p646-653.

Arsenic Removal Via Softening, Laurie McNeill and Marc

Edwards, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed.,

1994), p640-645

Assessing the Reliability of Low Pressure Membrane Systems for Microbial Removal, Samer S. Adham and Joseph G. Jacangelo, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p313-319.
Biotransformation of Pesticides in Simulated Groundwater

Columns, Gregory G. Wilber and Stuart R. Garrett, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p368-375.

Chemical Inactivation of Cryptosporidium Parvum in Drinking Water, Gordon R. Finch and E. Kathleen Black, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p42-49.

Comparison of Biological and Chemical/Physical Iron Removal, Charlotte D. Smith and James F. Smith, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p74-81.

Compliance With Arsenic Regulations Could Cost Bil-

lions, CE Sept. 94, p19-20.

Contribution of Waterborne Radon to Home Air Quality, Arun K. Deb, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p662-669

Control of Disinfection By-Products in Drinking Water, Philip C. Singer, EE July/Aug. 94, p727-744.

Control of Microbial Water Quality in the Little Rock, Arkansas Distribution System, Bruno Kirsch, Jr., Craig Noble, Christopher H. Yu, Blaise J. Brazos and John T. O'Connor, Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p58-65.

Cryptosporidium and the Milwaukee Incident, Kim R. Fox and Darren A. Lytle, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare

Edwards, ed., 1994), p50-57.

DBP Control in Drinking Water: Cost and Performance, Robert M. Clark, Jeffrey Q. Adams and Benjamin W. Lykins, Jr., EE July/Aug. 94, p759-782.

Denver's Direct Potable Water Reuse Demonstration Pro-

iect, William C. Lauer, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p657-660.

Effect of Aggregation on Vibrio Cholerae Inactivation, Robert M. Clark, Eugene W. Rice, Bennett K. Pierce, Clifford H. Johnson and Kim R. Fox, EE July/Aug. 94,

p875-887

Effect of Alkalinity on Copper Corrosion, Travis E. Meyer and Marc Edwards, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Ed-

water Ireament, Joseph N. Ryan, ed. and Made Edwards, ed., 1994b, p9-16 oagulation on Copper Corrosion, John P. Rehring and Marc Edwards, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p26-33.

Effects of Oxidant on Thermal Regeneration of Granular

Activated Carbon, Mark A. Waer and Vernon L. Snoey-

ink, EE Jan./Feb. 94, p190-201.

An Evaluation of the Impact of Recent Flooding on the Operation of a Groundwater Extraction and Treatment System at a Superfund Site, Kerry L. Gavett, Michael J. Fiore and Eric J. Meyer, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p764-771. Filtration and Backwashing Performance of Biologically-

Active Filters, A. Amirtharajah, Rasheed Ahmad, A. Al-Shawwa and P. M. Huck, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p178-185. A Gap in the Surface Water Treatment Rule: The Water-

sheds, Daniel A. Okun, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare

Edwards, ed., 1994), p501-507.

Investigations of Potential Radical Interaction in the Formation of Brominated Organic Compounds in Water, Rengao Song, Adam Eyring and Roger Minear, (Critical Issues in Water and Wastewater Treatment, Joseph N.

Ryan, ed. and Mare Edwards, ed., 1994), p467-475. Modeling Issues of Copper Solubility in Drinking Water, Michael R. Schock, Darren A. Lytle and Jonathan A. Clement, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed.,

1994), p17-25.

Modeling of Biofiltration of Natural Organic Matter in Drinking Water Treatment, Jack Z. Wang and R. Scott Summers, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed.,

- 1994), p452-459. Nation-Wide Bromide Occurrence and Bromate Formation Potential in Drinking Water Supplies, P. Westerhoff, M. Siddiqui, J. Debroux, W. Zhai, K. Ozekin and G. Amy, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p670-677.
- Potable Water Reclamation—A Practical Option to Traditional Sources, Gary Bostrom, Peter D. Binney and Glenn Hamilton, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p702-705.

Prediction and Verification of Atrazine Adsorption by PAC, Shaoying Qi, Samer S. Adham, Vernon L. Snoeyink and Ben W. Lykins, Jr., EE Jan/Feb. 94, p202-218.

Radiation Effects from Uranium Ore Bodies, James O. Duguid, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1337-1343.

Removal of Bromate After Ozonation by Electron Beam Irradiation, M. Siddiqui, G. Amy, W. Cooper, C. Kuruz and T. Waite, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p654-661.

Treatment of Drinking Water Containing Bromate and Bromide Ions, Taha F. Marhaba and Steven J. Medlar, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p476-

Trihalomethanes in Chlorinated Sacramento-San Joaquin Delta Drinking Water Simulated with the EPA WTP-THM Model, Russ T. Brown, Doug Brewer, Doug Owen and Zaid Chowdhury, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p492-500.

U.S. Drinking-Water Regulations: Treatment Technologies and Cost, Benjamin W. Lykins, Jr. and Robert M. Clark, EE July/Aug. 94, p783-802.

Water Chemistry of Lead Corrosion Control, Leland L. Harms, Jonathan A. Clement and Michael R. Schock, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p34-

Potential flow

Bed-Form Development, Stephen E. Coleman and Bruce W. Melville, HY May 94, p544-560.

Potential-Flow Solution to 2D Transition from Mild to Steep Slope, J. S. Montes, HY May 94, p601-621.

Wave Motion Through Porous Structures, Xiping Yu and Allen T. Chwang, EM May 94, p989-1008.

Power spectral density

Fatigue Damage Accumulation Under Stochastic Stress Histories, Shahram Sarkani, Naser K. Buresli and George Michaelov, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p839-844. Ground-Motion Spatial Variation Effects on Circular Arch

Responses, Hong Hao, EM Nov. 94, p2326-2341.

Spectral Analysis of Fluid Flow in Oscillating Grid Reactor, Leonard W. Casson, Desmond F. Lawler and David G. Bogard, EM Feb. 94, p346-367.

Power spectrum analysis

Experimental Verification of Numerical Model for Nonlinear Wave Evolutions, Takumi Ohyama, Serdar Beji, Kazuo Nadaoka and Jurjen A. Battjes, WW Nov./Dec. 94, p637-644.

Strange Attractors and Chaos in Wastewater Flow, Donald I. Angelbeck and Rafic Y. Minkara, EE Jan./Feb. 94, p122-137.

A Discussion of Nuclear Propulsion in Space Travel, Jeff Mitchell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p756-760.

Energy Analysis of High Temperature Lunar Manufactur-ing Processes, Belinda Wong-Swanson and Rocco Fazzolari, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p697-707.

Geographically Distributed Decision Support; The Tennes-see Valley Authority (TVA) TERRA System, Rene F. Reitsma, Peter Ostrowski, Jr. and Stephen C. Wehrend, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p311-314.

Roles of the Lunar-Solar Power System In Development of the Resources of Greater Earth for Mankind, David R. Criswell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p638-647.

Solar Power Satellites, Sean Russell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p793-798.

A Summary of the NEPSTP Nuclear Safety Program, Albert C. Marshall and G. Kompanietz, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p708-716.

TOPAZ II Qualification and Nuclear Testing Program, G. L. Schmidt, F. Thome, B. Ogloblin and E. Glushkov, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p729-738.

TOPAZ II System Description, Susan S. Voss, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p717-

Case Storage of Planning Knowledge for Power Plant Construction, Ren-Jye Dzeng and Iris D. Tommelein, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p293-300.

Characterization and Use of Fluidized-Bed-Combustion Coal Ash, Christina B. Behr-Andres and Neil J. Hutzler, EE Nov./Dec. 94, p1488-1506.

Diesel May Clean Coal-Powered Plants, ET Oct./Nov. 94,

Dynamic Compaction: Two Case Histories Utilizing Innovative Techniques, Albert A. Bayuk and Andrew D. Walker, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p55-67.

Monitoring of Structures During Repair of Underground Utilities, F. Dirk Heidbrink and John E. Pearson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Lood-

no, ed., 1994), p258-263.

Numerical Modeling for Sediment-Pass-Through Operations of Reservoirs, Howard H. Chang, Larry L. Harrison, Wing Lee and Scott Tu, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1014-1019.

Private Cogeneration Plant Flies at JFK Airport, CE Sept.

Start-ups, CE July 94, p8.

Steam Plant Becomes Biotech Lab. Terry Lundeen, Todd Perbix and John Schwartz, CE Sept. 94, p44-47.

Valuation Analysis for Independent Power Project, Richard K. Ellsworth, EY Aug. 94, p86-96.

Precipitation

Deformation of Fill Slopes Caused by Wetting, Iraj Noorany, Joel A. Sweet and Ian M. Smith, (Stability and Performance of Slopes and Embankments II, Raymond B. Seed, ed. and Ross W. Boulanger, ed., 1992), p1244-1257.

Nonlinear Regression Applied to Hydrologic Data, Alexander C. Demetracopoulos, IR May/June 94, p652-659.

Representation of Spatial Variability of Rainfall in Aggregated Rainfall-Runoff Models, Paolo Bartolini and Juan B. Valdés, HY Oct. 94, p1199-1219.

Precipitation, atmospheric

Climatic Perspective on the 1993 Mississippi R. Flood, Kenneth E. Kunkel, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rume, ed., 1994), p600-602.

Estimating Past Precipitation and Temperature from Fossil Ostracodes, Alison Jean Smith and Richard M. Forester, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2545-2552.

Historical Rainfall-Runoff Analysis Using the Antecedent Precipitation Index, B. J. Doeing, R. A. Gaines and T. M. James, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1095-

Impacts of the 1993 Flood on the Mississippi River in Illinois, Nani G. Bhowmik, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p613-617.

Interfacing GIS and Water Quality Models for Agricultural Areas, Vassilios A. Tsihrintzis, Hector R. Fuentes and Rao K. Gadipudi, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p252-256.

Late Glacial to Modern Climate Near Yucca Mountain Nevada, Richard M. Forester, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p2750-2754.

Long Term Predictability of River Stages under ENSO Influence, Juan B. Valdés, Dara Entekhabi and Paolo Bartolini, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p366-

The Miller City Levee Break and Incipient Meander Cutoff, K. A. Oberg and R. B. Jacobson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p623-627.

A Nested-Model Approach to Investigate Climate Change, Lauren E. Hay and George H. Leavesley, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p477-480.

A Preliminary Characterization of the Spatial Variability of Precipitation at Yucca Mountain, Nevada, Joseph A. Hevesi, Dale S. Ambos and Alan L. Flint, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2520-2529

The Summer of 1993 Floods Lower Missouri River, William H. Espey, Jr., Leo R. Beard and John E. Reinfurt, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p628-633.

Threshold Precipitation Events and Groundwater Recharge, Richard H. French and Roger L. Jacobson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p298-302.

Precipitation, chemistry

Inferences of Paleoenvironment From Petrographic, Chemical and Stable-Isotope Studies of Calcretes and Fracture Calcites, David T. Vaniman and Joseph F. Whelan, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2730-2737.

Isotope Systematics in Ground Water and Hydrogenic Deposits at ASPO, Sweden, Bill Wallin and Zell E. Peterman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p2692-2701.

Precipitation Kinetics of Radioactive Elements and Their Effect Upon Redox Conditions of the Nearfield, Hiroyasu Takase and Peter Grindrod, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p491-500.

Preconsolidation pressure

Preconsolidation versus Aging Behavior of Kaolinite Clay, G. A. Athanasopoulos, GT June 93, p1060-1066.

Analysis of Composite Panels Using Newton's Method, Norman F. Knight, Jr., (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p147-155.

Analysis of Stone Columns Foundation for Storage Tank by FEM, P. K. Kundu, K. G. Sharma and A. Nanda, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y.

Félio, ed., 1994), p701-710.

Application of a Parametric Long Term Model Concept to ne Delray Beach Nourishment Program, Michele C bianco, Huib J. De Vriend, Robert J. Nicholls and Marcel J. F. Stive, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p391-401.

Application of Heavy Duty Roadheaders for Underground Development of the Yucca Mountain Exploratory Study Facility, Jamal Rostami, Levent Ozdemir and David M. Neil, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p395-402.

Application of the "Diflupress L.D." Field Test to Settlement Calculation, C. Leidwanger, E. Flavigny, R. Chambon, J. L. Giafferi, P. Catel and G. Bufi, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1312-1324.

Assessment of Distress Models for Prediction of Pavement Service Life, Dar-Hao Chen, Musharraf Zaman and Joakim G. Laguros, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1073-

Atmospheric Circulation and Snowpack in the Gunnison River Basin, Gregory J. McCabe, Jr., (Water Policy and

River Basin, Gregory J. McCabe, Jr., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p481-484. Atmospheric Transport Prediction Using an Adaptive Finite Element Method, Darrell W. Pepper and Ashley F. Emery, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1946-1952

Becker Test Results from Gravel Liquefaction Sites, Leslie F. Harder, Jr., (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed.,

1994), p201-220. Bed Load Prediction in Steep Mountain Rivers, Tamotsu Takahashi and Toyoaki Sawada, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p810-814.

Behavior Prediction for Spread Footings on Sand, Sujit K. Bhowmik, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and

Spread Footings on Sand, Jean-Louis Braud, ed. and Robert M. Gibbens, ed., 1994), p.245-248. Brief Summary of National Bridge Scour Data Base, Mark N. Landers, J. Sterling Jones and Roy E. Trent, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p41-45.

Characterization of Incised Channel Development, Chester C. Watson, Daniel Gessler and Ronald R. Copeland, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p969-973.

Class A Prediction of Shallow Footing Settlements, Harry G. Poulos, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and

Robert M. Gibbens, ed., 1994), p133-136.
Comparison of Predicted and Measured Settlement of a
Test Embankment Over Soft Soil, Kuo-Hsia Chang, Wil-Jiam D. Kovacs and Ming-Jiun Wu, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1164-1175.

Coupled Lake Erie Air-Sea, Storm Resolving Forecasts and Predictions, the Viento Project, John G. W. Kelley, Chieh-Cheng J. Yen, Keith W. Bedford, Jay S. Hobgood and David J. Schwab, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p202-215.

Coupled Mass-Transport and Chemical-Equilibrium Mod-elling of Bronze Disease, M. B. McNeil and J. C. Wal-ton, (*High Level Radioactive Waste Management*, High Level Radioactive Waste Program Committee, 1994),

p1014-1019.

Crack Depths in Drying Clays Using Fracture Mechanics, Peter H. Morris, James Graham and David J. Williams, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p40-53.

Evaluating Concrete Mesoscale Properties Using Neural Networks, John E. Bolander, Jr., Toshihiro Ebihara and Hiroshi Hikosaka, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p475-

482.
Cruteria, George M. Kaminsky and Nicholas C. Kraus, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p180-193.

Experimental Study of Monochromatic Wave-Ebb Current Interaction, Michael J. Briggs and Philip L. -F. Liu, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p474Field Tests of Railway Bridges, D. A. Foutch, D. H. Tobias and J. Choros, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1118-1123.

FY93 Thermal Loading Systems Study, Steven F. Saterlie and Brent H. Thomson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p573-585.

General Urban Runoff Model for Water Quality Investiga-tions, Robert E. Pitt, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1213-1218.

A Generalized Approach to the Local Stability of Stiffened Plates: Part II-Approximate Solution, Archibald Sher-bourne and Osama Bedair, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1532-1537.

Global Environmental Change: Geoengineering Technology, Lyle M. Jenkins, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and

Stanley Lokaj, ed., 1994), p524-531.

The Great Lakes Forecasting System: An Overview, Keith W. Bedford and David J. Schwab, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p197-201.

Highway and Interline Transportation Routing Models, David S. Joy and Paul E. Johnson, (High Level Radioactive Waste Management, High Level Radioactive Waste

Program Committee, 1994), p1263-1269.

How Should the Migration and Retardation of Colloids be Characterized? Peter Grindrod, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2709-2718.

Hurricane Iniki, A Hindcast, Winds, Windwaves, Swells, Storm Surge, and Wave Run-Up, C. L. Bretschneider, J. D. Agrawal, N. C. Carmella and K. A. Wohlmut, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p772-781.

Hurricane Windspeeds at Inland Locations, P. J. Vickery and L. A. Twisdale, (Structures Congress XII, N. C Baker, ed. and Barry J. Loodno, ed., 1994), p473-478.

Immiscible Organic Liquid Recovery Using Unconfined Membranes, Leonard Jewell and Michael J. Semmens, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p90-

Impact of GOES Data on Surface Heat Flux Predictions, Yi-Fei P. Chu, Keith W. Bedford, Carolyn J. Merry and Jay S. Hobgood, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p212-216

Implementation and Validation of a Global Third-Generation Wave Model at Fleet Numerical Oceanography Center, Paul A. Wittmann and R. Michael Clancy, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p406-

Implementation of a Viscoplastic, Kinematic Hardening Constitutive Model for Impact Prediction, Jeffrey R. Sachs, Charles S. White and Frederick C. Taverner, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p388-401.

Improving Subsurface Characterization and Prediction of Contaminant Transport, Salwa Rashad and Craig H. Benson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p277-

In Situ Photothermal Deflection Spectroscopy of Uranium Dioxide Dissolution, James D. Rudnicki, Richard E. Russo and David W. Shoesmith, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2609-2615.

Program Communes, 1999, passes of the Introduction, Albert F. Dimillio, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p4-10.

Investigating the Behavior of a Lattice Structural Section, L. Shan and M. Hanson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p725-730.

Large Scale Measurements of Near Surface Orbital Velocities in Laboratory Waves by Using a Surface Following Device, Stefan Woltering and Karl F. Daemrich, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p770-784.

Lessons Learned From Missed Predictions, John A. Focht,

Jr., GT Oct. 94, p1651-1683.

Limitations on Scientific Prediction and How They Could Affect Repository Licensing, Richard A. Van Konynenburg, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

Load - Settlement Predictions for Spread Footing Event, Vincent Silvestri, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p141-144.

Load-Settlement Prediction of Footings on Steep Slopes, Pedro Arduino, Emir J. Macari and Mark Gemperline, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1385-1399.

Mechanistic Model of the Creep-Rupture Process in Fila-mentary Composites, Kerry T. Slattery, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham,

ed., 1994), p215-222.

Modeling Volatile Organic Contaminants' Fate in Waste-water Treatment Plants, H. Melcer, J. P. Bell, D. J. Thompson, C. M. Yendt, J. Kemp and P. Steel, EE May/ June 94, p588-609.

Monitoring and Predicting Corrosion of Weathering Steel, Richard D. Granata, James C. Wilson and John W. Fisher, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1209-1216.

NDBC Wave Data-Current and Planned, K. E. Steele and Theodore Mettlach, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p198-207

Near-Field Thermal Calculations for Individual Waste Package Placement, Suresh Lingineni, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p611-618.

Neural Networks for River Flow Prediction, Nachimuthu Karunanithi, William J. Grenney, Darrell Whitley and

Ken Bovee, CP Apr. 94, p201-220.

Nonlinear Decomposition of a 2-D Wave Field, Jun Zhang, R. E. Randall, L. Chen, C. A. Spell, J. K. Longridge and M. Ye, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p150-164.

Numerical Model Verification Using SUPERTANK Data in Surf and Swash Zones, Daniel T. Cox, Nobuhisa Kobayashi and David L. Kriebel, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas

C. Kraus, ed., 1994), p248-262.

Numerical Modeling of Fluid Mud Transport in Estuaries, Yan Yan and Earl J. Hayter, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1070-1074.

Peak Runoff Prediction for Small Rural Watersheds, James Y. Guo, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p604-607.

Pile Settlement Based on Dynamic Measurements, Samuel G. Paikowsky, Valerie A. LaBelle, John E. Regan and Les R. Chernauskas, (Vertical and Horizontal Deforma-tions of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p269-278.

Practical Method for Scour Prediction at Bridge Piers, J. R. Richardson and E. V. Richardson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer,

ed., 1994), p1-5.

Predictability and Sensitivity of Groundwater Transport Models, Hector R. Fuentes and Vassilios A. Tsihrintzis, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p267-271.

Predicted and Measured Behavior of Five Spread Footings on Sand, Geotechnical Special Publication No. 41, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994, 0-7844-0025-3, 230pp.

Predicted Load-Settlement Behavior of Spread Footings on Sand, Casan L. Sampaco, Loren R. Anderson, Joseph A. Caliendo, Abdel Agallouch, Hogan Chang, Chia-Ching Lin, Elhassan Elhassan, Kyle Gorder, Roger Greaves, Makarand S. Jakate, Won C. Kim, Arthur L. Moss and Darrin Sjoblom, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p232-235.

Predicting Hydrologic Impacts of a Severe and Sustained Drought on the Colorado River Basin, Taiye B. Sangoyomi and Benjamin L. Harding, (Water Policy and Ma agement: Solving the Problems, Darrell G. Fontane, ed.

and Harry N. Tuvel, ed., 1994), p616-619.

Predicting the Impact from Significant Storm Events on a Hazardous Waste Site, Udai P. Singh, Neal P. Dixon and J. Stephen Mitchell, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p772-780.

Predicting the Load-Displacement Behaviour of Spread Footings on Sand, Guido Gottardi and Paolo Simonini, (Predicted and Measured Behavior of Five Spread Foot ings on Sand, Jean-Louis Briaud, ed. and Robert M.

Gibbens, ed., 1994), p236-239.

Predicting the Settlement of the Texas A&M Spread Foot-ings on Sand, G. Wiseman and J. G. Zeitlen, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p129-132.

Predicting Wave Spectra With a Third Generation Spectral Wave Model, Charles L. Vincent, Ph.D., Robert E. Jensen, Ph.D. and Hans C. Graber, Ph.D., (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p420-432.

Prediction of Foundation Load/Settlement Characteristics, John Scott and Keith Nicholls, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p177-

181.

Prediction of Ground Deformations Due to Excavation-Application to Tunnel Lining Design in Weak Rock, Wern-ping Chen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1997-2005.

Prediction of Land Subsidence due to Ground-Water Use in Snow Country, Kazumasa Mizumura, HY Apr. 94,

Prediction of Sediment Yield, U. C. Kothyari, A. K. Tiwari and Ranvir Singh, IR Nov./Dec. 94, p1122-1131.

Prediction of Settlement for Five Footings, Ameir Altaee and Bengt H. Fellenius, (Predicted and Measured Be-havior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p206-

Prediction of Settlement of Footings on Sand, G. Mesri and M. Shahien, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and

Robert M. Gibbens, ed., 1994), p188-191.

Prediction of Shallow Foundation Settlement on Sand. Mazen E. Adib and Ramin Golesorkhi, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p228-231.

Prediction of Structural Response to Large Earthquakes by Using Recordings From Smaller Earthquakes, Erdal Safak, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1391-1396.

Prediction of Vertical Load on Spread Foundations at Small and large Deflections, Richard J. Deschamps and Scott J. Ludlow, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p202-205.

Predictions of Shallow Foundation Behavior for Settlement '94, Storer J. Boone, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briand, ed. and Robert M. Gibbens, ed., 1994), p168-172.

A Predictive Model of Sewage Pumpout Station Use Among Chesapeake Bay Boaters, Stuart Cottrell and Alan Graefe, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p59-68.

490

- A Probabilistic Approach to Assessing Radioactive Waste Container Lifetimes, Fiona M. Porter, Chris C. Naish and Susan M. Sharland, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1008-1013.
- Probabilistic Behavior of Pavements, Kelvin C. P. Wang, John Zaniewski and George Way, TE May/June 94, p358-375.
- Problems of Stream Flood Simulation and Prediction, Shou-shan Fan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1110-1114.
- A Procedure for Predicting Seismic Deformation of Earth Structures, Hendra Jitno and Peter M. Byrne, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p711-725.
- Quality Management of Earthwork Using Knowledgebased Systems, Shrinath J. Kotdawala and Imad A. Basheer, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p426-429.
- Refinement of Cost Estimates with Artificial Neural Nets, Irtishad U. Ahmad and Syed T. Rahman, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1373-1380.
- A Second-Generation Wave Model for Coastal Wave Prediction, J. A. Ewing and R. C. Hague, (Ocean Wave Measurement and Analysis, Oville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p576-589.
- Seismic Response Studies on a Two Span Slab-On-Girder Bridge, J. B. Mander, S. S. Chen, D.-K. Kim and D. S. MacEwan, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), 361-366.
- Settlement '94, Franco Ariemma, Avtar S. Vasu, Fred Agostino and Judith S. Doyle, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p192-195.
- Settlement of Dynamically Compacted Deposits, Robert G. Lukas and Norman H. Seiler, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1590-1601.
- Settlement of Embankments on Soft Clays, Gholamreza Mesri, Dominic O. Kwan Lo and Tao-Wei Feng, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p8-56.
- Settlement of Spread Footings on Granular Soil, Chandra S. Brahma, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), pl 60-163.
- Settlement of Test Footings: Predictions from the University of New Mexico, Koon Meng Chua, Ling Xu, Eric Pease and Sameer Tamare, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p240-
- Settlement Prediction for Driven Piles and Pile Groups, Harry G. Poulos, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1629-1649.
- Settlement Prediction of Spread Footing Based on Laboratory Test Results, Mohammed S. A. Siddiquee, Tadatsugu Tanaka and Fumio Tatsuoka, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), pl 37-140.
- Settlement Predictions Footing Load Tests on Sand, Erik Funegard and Pickett Warden, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p199-
- 201.
 Settlements of Highway Embankments on Soft Lacustrine Deposits, Loren R. Anderson, Casan L. Sampaco, Syed H. Gilani, Edward Keane and Loren Rausher, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994b, p376-397.

- Short-Term Forecasts for Lake Erie, John G. W. Kelley, Chieh-Cheng J. Yen, Jay S. Hobgood, David J. Schwab and Keith W. Bedford, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p227-231.
- A Spectral Wave Model for the Coastal Zone, L. H. Holthuijsen, N. Booij and R. C. Ris, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p630-641.
- A Speed Prediction Model for New Zealand Highways, Christopher R. Bennett and Roger C. M. Dunn, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p728-734.
- Spread Footing Prediction Event at the National Geotechnical Experimentation Site on the Texas A&M University Riverside Campus, David Thomas, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p149-152.
- Spread Footing Predictions, Kuo-Hsia Chang, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p157-159.
- Spread Footing Settlement Prediction, Carsten H. Floess, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p164-167.
- Spread Footing Settlement Prediction for ASCE Specialty Conference "SETTLEMENT" '94", Jon R. Foshee, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p186-187.
- Spread Footing Settlement Prediction for the National Geotechnical Experimentation Site Prediction Event: Settlement '94, P. Cooksey, Q. Tang, M. Zhao, M. Mauldon and E. Drumm, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p173-176.
- Test and Prediction Results for Five Large Spread Footings on Sand, Jean-Louis Briaud and Robert Gibbens, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p92-128.
- Test and Prediction Results for Five Spread Footings on Sand, Jean-Louis Briaud and Robert M. Gibbens, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1897-1898.
- Time-related Deflections of Cantilever Bridges, Cornelis van der Veen, Marcel van Vliet and Ane de Boer, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p922-929.
- Towards a Rational Method of Predicting Settlements of Spread Footings on Sand, Martin Fahey, Peter K. Robertson and Ahmed A. Soliman, Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p598-611.
- UF Spread Footing Prediction, F. C. Townsend, P. Ruesta and R. Morgan, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p182-185.
- Uncertainties in the Prediction of Hurricane Windspeeds, L. A. Twisdale, P. J. Vickery and M. B. Hardy, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p706-715.
- Use and Abuse of Settlement Analysis, Ralph B. Peck, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), pl-7.
- The Use of Expert Judgment Elicitation to Predict Future Climate for the Yucca Mountain Nevada Vicinity, Aaron DeWispelare, Michael P. Miklas, Jr., A. Berge Gureghian, L. Tandy Herren, Robert T. Clemen and James R. Park, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1614-1621.

Velocity Moments on a Macro-Tidal Intermediate Beach, Vetocity Monients on a Marci-Itali Intermediate Beach, Yolanda L. M. Foote and David A. Huntley, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p794-808.

Water Resources Planning and Management: Now & Twenty Years from Now, Kyle E. Schilling, (National Water Resources Panaltins, Where is the Environment.)

Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p219-

Wave Runup on and Wave Reflection from Coastal Structures, John P. Ahrens, William N. Seelig, Donald L. Ward and William Allsop, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael

Hemsley, ed., 1994), p489-502.
Wind Forces on Industrial Facilities, Joseph A. Bohinsky and Hikmat E. Zerbe, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1036-1041.

Predictive control

Modal Predictive Control of Structures. I: Formulation, F. López-Almansa, R. Andrade, J. Rodellar and A. M. Reinhorn, EM Aug. 94, p1743-1760.

Modal Predictive Control of Structures. II: Implementation, F. López-Almansa, R. Andrade, J. Rodellar and A. M. Reinhorn, EM Aug. 94, p1761-1772.

Prefabrication

Adaptability of Translation-Grid Shells, J. G. Oliva Salinas, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p133-141.

The Behaviour and Design of Stressed-Arch (Strarch) ne Benaviour and Design of Stressed-Arch (Strarch) Frames, Murray J. Clarke and Gregory J. Hancock, (Spa-tial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p200-209.

Design Techniques for Rectangular Lunar Modules, Mark E. Schroeder, Philip J. Richter and Jim Day, (Engineering, Construction, and Operations in Space IV, Rodney Galloway, ed. and Stanley Lokaj, ed., 1994), p176-185

Equivalent Continuum Model for Deployable Flat Lattice Structures, Charis Gantes, Jerome J. Connor and Robert D. Logcher, AS Jan. 94, p72-91.

Preloading

Preloading Organic Soils to Limit Future Settlements, K. Peter Yu and Rudolph P. Frizzi, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p476-490

Preservation

The Engineer As Preservationist, Marie Ennis, CE Sept. 94, p48-51.

The Future of the Past: Historic Preservation at the Metropolitan Washington Airports, H. Henry Ward, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p8-17.

Lessons for Effective Urban-Containment and Resource-Land-Preservation Policy, T. Moore and A. C. Nelson, UP Dec. 94, p157-171.

Preserve and Protect, Loring A. Wyllie, Jr., CE Feb. 94,

Pressure distribution

Algorithm for Siphon-operated LPD Sewage Manifolds, Dennis L. Kaiser, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p424-

A Computational Algorithm for Analysis of Rectangular Footings Under Partial Contact with Soil, P. Rajendran, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p652-659.

Hydraulics of Center-Pivot Laterals, Edmar J. Scaloppi and Richard G. Allen, IR May/June 93, p554-567.

Pressure measurement

Factors Affecting Degradation of Clay Masses, Paul A. Gil-bert, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p449-457.

Force and Pressure Measurements in Spillway Plunge Pools, Peter J. Rae, (Hydraulic Engineering '94, George Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p553-557.

Hydrodynamic Forces in Hydraulic Jump Stilling Basins, António N. Pinheiro, António C. Quintela and Carlos M. Ramos, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p321-330.

Inverse Transient Analysis in Pipe Networks, James A. Liggett and Li-Chung Chen, HY Aug. 94, p934-955.

Measurement and Analysis of Wave Data in Los Ange les-Long Beach Harbors, James Rosati, III and Paul T. Puckette, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p223-235.

The Use of Piezoelectric Film in Cavitation Research, Sauray Paul, Christopher R. Ellis and Roger E. A. Arndt, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p454-471.

Pressure measuring instrument

A Computer-Controlled, Precision Pressure Standard, Othon K. Rediniotis, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p509-518.

Field Test of Buried Ocean-Wave Directional Spectrometer System, Tom Nye and Tokuo Yamamoto, WW Sept./ Oct. 94, p451-467.

Pressure pipes

Seepage-Induced Effective Stresses and Water Pressures Around Pressure Tunnels, Gabriel Fernández and Tirso A. Alvarez, Jr., GT Jan. 94, p108-128.

Pressure reduction

Construction of a Cofferdam Pressure Relief System, J. Taylor, W. L. Galbraith, G. Richters, J. E. Baka and C. C. Chang, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p93-111.

Design, Construction, and Maintenance of Relief Wells, US Army Corps of Engineers, 1993, 0-87262-955-4, 90pp.

Pressure vessels

Spacecab: A Concept for Commercial Human Spaceflight, Andrew Petro, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1504-1511.

Pressuremeter tests

Behavior Prediction for Spread Footings on Sand, Sujit K. Showmik, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p245-248.

Settlement Predictions Footing Load Tests on Sand, Erik Funegard and Pickett Warden, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p199-

State Parameter from Self-Boring Pressuremeter Tests in Sand, H. S. Yu, GT Dec. 94, p2118-2135.

Uplift Capacity of Small-Diameter Drilled Shafts from In Situ Tests, Alan J. Lutenegger and Gerald A. Miller, GT Aug. 94, p1362-1380.

Pressuremeters

Addendums to the Prediction Package, Robert Gibbens, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p86-91.

Pressures

Air-Permeability Measurement for Soil at Low and High Pressure, Shawn A. Rodeck, Bruce A. DeVantier and Braja M. Das, EE Sept./Oct. 94, p1337-1343

Buckle Propagation: Steady-State Finite-Element Analysis, André C. Nogueira and John L. Tassoulas, EM Sept. 94, p1931-1944.

Effects of Air Compression and Counterflow on Infiltration into Soils, M. E. Grismer, M. N. Orang, V. Clausnitzer and K. Kinney, IR July/Aug. 94, p775-795.

Field Experiments for Wind Effects on Low Building Kishor C. Mehta, Douglas A. Smith and Byron B. Yeatts, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1451-1456.

How to Improve Control of Flow and Reduce Cavitation, Ergun Bakall, Michael T. Stift and Paul W. Johnson, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p89-103.

Improving the Pipeline Hydrostatic Leak Test Model, Rodney F. Wedge, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p182-205. Influence of Liquid Length Variation in Hydraulic Tran-

sients, Enrique Cabrera, José Abreu, Rafael Pérez and Antonio Vela, HY Dec. 92, p1639-1650.

Parametric Study of Axisymmetric Circular-Glass Plates, C. V. Girija Vallabhan, Y. C. Das and Manjunatha Ramasamudra, ST May 94, p1663-1671. Pressure-Driven Gas Flow in Heated, Partially-Saturated

Porous Media, Franklin T. Dodge and Ronald T. Green,
(High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2217-2227.

Properties of Soundless Chemical Demolition Agents, Jimmie Hinze and James Brown, CO Dec. 94, p816-827. Shakedown Analysis of Hollow Spheres, Wei Jiang, EM

July 94, p1447-1480.

Shallow Tunnels in Cohesionless Soil: Stability of Tunnel Face, Pierre Chambon and Jean-François Corté, GT July

94, p1148-1165.

A Study of Two Phase Flow in Fracture Networks, Kenzi Karasaki, Stuart Segan, Karsten Pruess and Stratis Vom-voris, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2633-2638.

Surface Pressures on the Roof of the Texas Tech Experimental Building: Model and Full-Scale, Henry W. Tieleman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1445-1450.

Pressurized flow

Dual Purpose Pipeline in the 1900s Environment, Randall C. Hill and Javier Saunders, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p119-128.

Prestressing

Anchorage of Non-Metallic Prestressing Tendons, Richard J. Schmidt, Charles W. Dolan and Lars E. Holte, (Structures Congress XII, N. C. Baker, ed. and Barry J. Lood-

no, ed., 1994), p1415-1420.

Detailing Effects in Anchors for FRP Prestressing Tendons, Todd Stueve, Charles W. Dolan and David E. Walrath, (Infrastructure: New Materials and Methods of Repair,

Kim D. Basham, ed., 1994), p386-391.

RMID. DASHARII, ed., 1994), p386-91.
Form Finding Numerical Methods for Tensegrity Systems, René Motro, Sihem Belkacem and Nicolas Vassart, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p704-713.
Graphic Pestressed Concepts Deal for New Fortilist.

Graphite Prestressed Concrete Deck for Navy Facilities, Srinivasa L. Iyer, Vijayakumar Ranganathan and Randy Bagby, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p400-407.

Graphite Prestressed Piles and Fiberglass Prestressed Pilecaps for U.S. Navy Pier at California, Srinivasa L. Iyer and Ramabhadran Sivakumar, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p392-399.

Inspection and Repair of a Timber Truss Bridge - An Application of Nondestructive Testing, Norbert J. Volny, (Infrastructure: New Materials and Methods of Repair,

Kim D. Basham, ed., 1994), p654-661.

Prestress Influence on Shear-Lag Effect in Continuous Box-Girder Bridge, Shih Toh Chang, ST Nov. 92, p3113-3121.

Pretensioning

Development Length and Ultimate Strength of Fiberglass Pretensioned Beams, Mohsen A. Issa and Ahmed Amer, (Infrastructure: New Materials and Methods of Repair,

Kim D. Basham, ed., 1994), p408-416s.

Evelopment Length of Uncoated Prestressing Strand, Svan N. Lane, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p624-629.

Prestressed Concrete Failures Due to Uplift, Wimal Suaris, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1433-1438.

Static Response of Fiberglass Pretensioned Beams, Rajan Sen, Mohsen Issa, Zeying Sun and Mohsen Shahawy, ST Jan. 94, p252-268.

Static Response of Fiberglass Pretensioned Columns, Mohsen Issa, Rajan Sen, Daniel Mariscal and Mohsen

Shahawy, ST Dec. 94, p3634-3648

Tests of Full-Size Pretensioned AASHTO Beams with Debonded Strands, O. Abdalla, J. A. Ramirez and R. H. Lee, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1409-1414.

Determinants and Trends in Water Right Market Prices, Ari M. Michelsen, Patrick Person and Robert A. Young, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p165-168.

Emission-Cost Trade-offs and Rate Feedback for Electric Utilities, Benjamin F. Hobbs, EY Dec. 94, p103-121

What is the Market Value of Your Firm? William F. Peck, ME Mar./Apr. 94, p15-17.

Priorities

The Law of the Colorado River: Can It Cope With Severe Sustained Drought? Lawrence J. MacDonnell, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p628-631.

Prioritizing Transit Markets Using Analytic Hierarchy Process, Snehamay Khasnabis and Bharat B. Chaudhry, TE Jan/Feb. 94, p74-93.

Proactive Career Management, Glenn E. Schirmer, ME

Jan./Feb. 94, p33-36.

Risk-Based Environmental Priorities: What Priority? E. Donald Elliott and Alan B. Horowitz, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p24-33.

'Geoumbrella' in the Offing, CE July 94, p19

Compressive Strength of Masonry Prisms, Magdi A. Khalifa and Ahmed E. Magzoub, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1100-

Prisms and Antiprisms, Pieter Huybers and Gerrit van der Ende, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p142-151.

Testing of Hollow Clay Tile Masonry Prisms, W. D. Jones and M. B. Butala, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1094-1099.

Heads I Win, Tails You Lose, CE Apr. 94, p8.

Hexagonal Prison, The Shape of Things to Come, CE June 94, p12.

Start-ups, CE Jan. 94, p8.

Private sector

Development of the Sheboygan Waterfront Sheboygan, Wisconsin, Robert Doyle, Fred A. Klancnik and Robert Petersen, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p552-561.

The Evolving Role of Marinas as Public Marine Parks and Water Recreation Areas in Southern California 1960-1994, John C. Corrough, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A.

Klancnik, ed., 1994), p39-48. Federal Cleanups: Good News from Bad, Teresa Austin,

CE Mar. 94, p48-51.
Let's Keep this Private, CE Sept. 94, p8.
New Problems in Ground & Water Lease Administration, Allan D. Kotin and Faith F. Backus, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p154-161.
P3 for Marinas, Parks & Recreation, Richard Milbrodt,

(Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p180-186. Policy on Private Water Sales in Rural Ghana, Fred O. Boadu, WR Nov./Dec. 94, p944-961.

Service Lateral Reconstruction in the Isle of Man, Jeff Wells, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p257-264.

Waterfront Renaissance Racine, Wisconsin, Thomas N. Wright, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994),

Privatization

Argentina: Back in Business, Kaitlin Quistgard, WP Spring 94, p19-22.

Black & Veatch in Unique Overseas Partnership, CE Jan.

94, p12-13. Increasing Role of Privatization in Engineering and Construction, Janet K. Yates and Subhransu Mukherjee, ME Mar./Apr. 94, p57-65.

P3 for Marinas, Parks & Recreation, Richard Milbrodt, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p180-186.

Prioritizing Transit Markets Using Analytic Hierarchy Process, Snehamay Khasnabis and Bharat B. Chaudhry, TE Jan./Feb. 94, p74-93.

Puerto Rico Privatizes the Roads, Jack S. Schnettler, CE Feb. 94, p56-58.

Sharing the Risk, Candace Port-Hull, WP Special issue 94, p14-19.

Probabilistic methods

Analysis of Accident Reduction Potentials of Pavement Hashem R. Al-Masaeid and Kumares C. Sinha, TE Sept./Oct. 94, p723-736.

Sinna, 1E Sept. Oct. 94, 17(2)-7(3).
Collapse Load Calculated by Probability Based Analysis
Compared to Full Scale Tower Test Results, Thien T.
Do, Michael D. Miller, Leon Kempner, Jr., Troy D.
Lyver and Wendelin H. Mueller, III., (Dynamic Response and Progressive Failure of Special Structures,
Ramesh B. Malla, 1993), p48-59.

The Determination of Typhoon Design Wave By Synthetic Probibility Method, Nai Kuang Liang and Hai Kuan Peng, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994),

p1040-1047

Estimation of Peak Flow and Runoff Volume with Response Surface Method, Shie-Yui Liong and Yaacob Ibrahim, WR Mar./Apr. 94, p161-175.

The Hazard In Using Probabilistic Seismic Hazard Analysis, Ellis L. Krinitzsky, CE Nov. 93, p60-61.

A Health Risk Based Approach for HLW Repository Envi-ronmental Protection Criteria, R. F. Williams, R. L. Yang, R. McGuire and R. E. Wilems, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1435-1450.

Inverse Reliability Problem, Armen Der Kiureghian, Yan Zhang and Chun-Ching Li, EM May 94, p1154-1159.

Life Prediction of Materials/Systems of Transportation Infrastructure, K. P. George, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1081-1088.

A Probabilistic Approach to the Response of Tall Build-ings to Wind Loadings, Morteza A. M. Torkamani and Ramadan S. Murad, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1439-1444.

Probabilistic Observation Method for Settlement-Based Design of a Landfill Cover, Wilson H. Tank, Robert B. Gilbert, Mauricio Angulo and Richard S. Williams, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1573-1589.

Reliability Applied to Slope Stability Analysis, John T. Christian, Charles C. Ladd and Gregory B. Baecher, GT Dec. 94, p2180-2207.

Reliability-Based Pier Scour Engineering, Peggy A. Johnson, HY Oct. 92, p1344-1358.

Seismic Hazard Analysis of Nonlinear Structures. I: Methodology, Paolo Bazzurro and C. Allin Cornell, ST Nov. 94, p3320-3344.

Sensitivity and Probabilistic Analyses of the Impact of Climatic Conditions on the Infiltration Rate in a Variable Saturated Multilayered Geologic Medium, A. Berge Gureghian, Aaron R. DeWispelare and Budhi Sagar, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1622-1633.

Swiss Guideline: Protection Objectives for the Disposal of Radioactive Waste, Auguste Zurkinden, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1429-1434.

Tonnes Dry Solids Reviewed, Robert C. Rullens, Kees d'Angremond and Gerard Ottevanger, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p673-682.

Probabilistic models

Finite Element Analysis of Shear in RC Girders, Pascal Casanova, Merret Fliedner, Pierre Rossi and Franz-Josef Ulm, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p223-229.

Planning Model for Sewer System Rehabilitation, Edward H. Burgess, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p30-38.

Probabilistic Delay Model at Stop-Controlled Intersection, Samer M. Madanat, Michael J. Cassidy and Mu-Han

Wang, TE Jan./Feb. 94, p21-36.

Probabilistic Modeling of Scheduling Uncertainty: Methods and Tools, Ali Touran, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p380-383.

A Regional Model of Daily Streamflow for the Northeast United States, Neil M. Fennessey and Richard M. Vogel, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

Reliability of Underground Pipelines Subject to Corrosion, M. Ahammed and R. E. Melchers, TE Nov/Dec. 94,

p989-1002.

Reservoir Operation Using Bayesian Inferencing and Balancing Rules, Emmanuel U. Nzewi, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p173-176

The Safety Advisor: An Interactive Object-Oriented Program for Assessing the Safeness of Roadway and Roadside Designs, Malcolm H. Ray, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p341-348.

Probability

Anatomy of Best Estimate, Leo R. Beard, HY June 94, p679-692

Estimation of Directional Spectra by ML/ME-Methods, Ola Haug and Harald E. Krogstad, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p394-405.

Extreme Winds Estimation by 'Peaks Over Threshold' and Epochal Methods, J. L. Gross, N. A. Heckert, J. A. Lechner and E. Simiu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1472-1477. The Hazard In Using Probabilistic Seismic Hazard Analy-

sis, Ellis L. Krinitzsky, CE Nov. 93, p60-61.

Human Error Models for Structural Reliability, Eric P. Steinberg, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p199-204.

Hurricane Windspeeds at Inland Locations, P. J. Vickery and L. A. Twisdale, (Structures Congress XII, N. C Baker, ed. and Barry J. Loodno, ed., 1994), p473-478.

Hyperspace Division Method for Structural Reliability, Satoshi Katsuki and Dan M. Frangopol, EM Nov. 94, p2405-2427.

Mechanistic Model for Transition Probabilities, K. H. Chua and C. L. Monismith, TE Jan./Feb. 94, p144-159.

Modeling of Extreme Loading by 'Peaks Over Threshold' Methods, J. L. Gross, N. A. Heckert, J. A. Lechner and E. Simiu, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p135-

Multi-Objective Optimization of Construction Schedules, Tadeusz Kasprowicz, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p185-190.

Overweight Trucks and Safety of Bridges, Gongkang Fu and Osman Hag-Elsafi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p284-289.

Policy Issues of Transporting Spent Nuclear Fuel by Rail, H. Barry Spraggins, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p163-167.

Predicting Construction Contract Surety Bond Claims Using Contractor Financial Data, Gordon D. Severson, Jeffrey S. Russell and Edward J. Jaselskis, CO June 94, p405-420.

Probabilistic Behavior of Pavements, Kelvin C. P. Wang, John Zaniewski and George Way, TE May/June 94, p358-375

Probabilistic Evaluation of Human Perception Threshold of Horizontal Vibration of Buildings (0.125Hz to 6.0Hz), Jun Kanda, Yukio Tamura, Kunio Fujii, Tamio Ohtsuki, Kiyoto Shioya and Shinji Nakata, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), n648-653

A Probability Based Approach to the Design and Operation of Soil Vapor Extraction Systems, Kenneth K. Kebbell and William F. McTernan, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p564-571.

Probability of Severe Hurricanes Across the Gulf of Mexico, L. E. Chouinard and Chang Liu, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p696-705.

Railroad Accident Probability Model, Phillip Fanchon and H. Barry Spraggins, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p666-670.

Reliability Analysis of Stiffened Panels, E. Nikolaidis, O. Hughes, B. M. Ayyub and G. J. White, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1466-1471.

Reliability Assessment of Prestressed Concrete Beams, Ali S. Al-Harthy and Dan M. Frangopol, ST Jan. 94, p180-

Reliability of Flood Warning Systems, Roman Krzyszto-fowicz, Karen S. Kelly and Dou Long, WR Nov./Dec. 94, p906-926. Reliability-Based Design of Prestressed Concrete Beams

Ali S. Al-Harthy and Dan M. Frangopol, ST Nov. 94, p3156-3177.

Risk of Extreme and Catastrophic Events, Jim Lambert, (), p345-347

Seismic Analysis of Failure and Loss of Function of Water Pumping Facilities, M. A. Cassaro, S. E. Hamburg, D. An and M. J. Cassaro, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1208-1213.

Seismic Fragility Analysis of Sheahan Pumping Building, Howard H. M. Hwang, Ah Lim Ch'ng and Hui-Mi Hsu, (Structures Congress XII, N. C. Baker, ed. and Barry J.

Loodno, ed., 1994), p1006-1011.

Seismic Issues in Structural Engineering Codes and Practice, Vilas Mujumdar, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1214-1219. Statistical Evaluation of Truck Overloads, Jamshid Mohammadi and Nadir Shah, TE Sept./Oct. 92, p651-

Strength Variability of Wood Formwork Members, Saeed

Karshenas, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p526-531.

Subjective De-Biasing of Data Sets: A Bayesian Approach, M. Elisabeth Paté-Cornell, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p175-185.

Substantiated Risk Assessment of Jacket Structure, P. S. Tromans and J. W. van de Graaf, WW Nov./Dec. 94, p535-556.

Wind Deflection Probability Analysis, Benjamin J. Biller, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p869-874.

Probability density functions

Analysis of Selected Prototype Wave and Runup Data, Todd L. Walton, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p913-917.

Comparison of Some Estimation Methods in Frequency Analysis, Zoubeida Kebaili-Bargaoui, HY Feb. 94,

p228-235.

Conditioned Stochastic Processes for Conditional Random Fields, Hiroyuki Kameda and Hitoshi Morikawa, EM Apr. 94, p855-875.

Design Waves and Wave Spectra for Engineering Applica-tions, Chung-Chu Teng, Gerald L. Timpe, Ian M. Palao and David A. Brown, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hems-ley, ed., 1994), p993-1007.

Joint Probability of Superelevated Water Levels and Wave Heights at Duck, North Carolina, Douglas A. Gaffney and Gregory L. Williams, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p905-917.

Nonlinear Effects on Wave Envelope and Phase, M. Aziz Tayfun, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p755-768.

On Measurements of Particle Spinning Motion, Hong-Yuan Lee and In-Song Hsu, (Fundamentals and Ad-vancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p149-158.

Probability distribution

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Assessing Risk of Ground-water Pollution from Land-Disposed Wastes, Kahraman Ünlü, EE Nov./Dec. 94, p1578-1597

Distributions of Envelope and Phase in Weakly Nonlinear Random Waves, M. Aziz Tayfun, EM May 94, p1009-

Effect of Data Sampling Time Resolution on Probability Distribution of Elapsed Time Between Rainfalls, James Distribution of Elapsed Time Between Rainians, James W. Ellerbroek, Ben Chie Yen and Robert Riggins, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p336-340.

Evaluating Risk of Extreme Events for Univariate-Loss Functions, James H. Lambert and Duan Li, WR May/

June 94, p382-399.

Fitting Beta Distributions Based on Sample Data, Simaan M. AbouRizk, Daniel W. Halpin and James R. Wilson, CO June 94, p288-305.

Gust Speeds in Hurricanes, R. D. Marshall, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p1457-1462.

Measurement and Analysis of Wave Data in Los Ange-Puckette, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p223-235.

Monte Carlo Simulation for Correlated Variables with Marginal Distributions, Che-Hao Chang, Yeou-Koung Tung and Jinn-Chuang Yang, HY Mar. 94, p313-331.

Nonlinear Effects on Wave Envelope and Phase, M. Aziz-Tayfun, (Ocean Wave Measurement and Analysis, Or-ville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p755-768.

A Regional Model of Daily Streamflow for the Northeast United States, Neil M. Fennessey and Richard M. Vogel, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

Stochastic Control With Bounded Sample Paths: An Application to Reservoir Systems, S. G. Fletcher and K. Ponnambalam, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1025-

1029

Survey Results for Concrete Construction Live Loads on Newly Poured Slabs, Haitham Ayoub and Saeed Karshe-

nas, ST May 94, p1543-1562.

Uncertainties in the Prediction of Hurricane Windspeeds, L. A. Twisdale, P. J. Vickery and M. B. Hardy, (*Hurri*canes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p706-715.

Men and How Can You Specify a Probability Distribution When You Don't Know Much? Yacov Y. Haimes, Timothy Barry and James H. Lambert, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p19-25.

Probability theory

Average-Bid Method—Competitive Bidding Strategy, Photios G. Ioannou and Sou-Sen Leu, CO Mar. 93, p131-147.

Equivalent Linearization for Seismic Responses. 1: Formulation and Error Analysis, Young J. Park, EM Nov. 92, p2207-2226.

Bridges, J. O. Sobanjo, George Stukhart and Ray W. James, ST Jan. 94, p81-99.

Fatigue-Reliability Evaluation of Steel Bridges, Zhengwei Zhao, Achintya Haldar and Florence L. Breen, Jr., ST May 94, p1608-1623.

Fatigue-Reliability Updating Through Inspections of Steel Bridges, Zhengwei Zhao, Achinyta Haldar and Florence L. Breen, Jr., ST May 94, p1624-1642. Nonlinearity in Wave Crest Statistics, David L. Kriebel and

Thomas H. Dawson, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p61-75.

Orthogonal Series Expansions of Random Fields in Reliability Analysis, Jun Zhang and Bruce Ellingwood, EM

Dec. 94, p2660-2677

Point-Estimate Method for Calculating Statistical Mo-ments, K. S. Li, EM July 92, p1506-1511.

Probabilistic Design of Open Drainage Channels, Said M.

Easa, IR Nov/Dec. 92, p868-881.

Random Vibration of Beam under Moving Loads, Giuseppe Ricciardi, EM Nov. 94, p2361-2380.

Roof-Snow Load for Seismic-Design Calculations, Mi-

chael J. O'Rourke and Robert S. Speck, Jr., ST Sept. 92,

Second-Order Upper Bounds on Probability of Intersection of Failure Events, Qiang Xiao and Sankaran Mahadevan, EM Mar. 94, p670-674.

Probes, instruments

Gas in Soil I: Detection and η-Profiling, Nader S. Rad and Tom Lunne, GT Apr. 94, p697-715.

Kinematics of Wave Overtopping on Marine Structure, J. J. Lee, F. Zhuang and C. Chang, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p821-834.

ORP Measurement in Anaerobic Systems Using Flow-Through Cell, Munish Gupta, Ashutosh Gupta, Makram T. Suidan, Gregory D. Sayles and Joseph R. V. Flora, EE

Nov./Dec. 94, p1639-1645. Precision of Evapotranspiration Estimates Using Neutron

Probe, Osmar A. Carrijo and Richard H. Cuenca, IR Nov./Dec. 92, p943-953.

A Tank Moisture Model (TAMMO) for Describing Neutroan Scan Data, Edward R. Siciliano, Hans Toffer and W. Todd Watson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1102-1103.

Problem solving

Applying a Problem-Solving and Consensus Building Approach to Transportation Infrastructure and Environmental Protection, Eugene W. Cleckley, (National Water Resources Regulation: Where is the Environmental Pen-dulum Now?, Howard Holme, ed., 1994), p226-228.

Automated Corrective Action Selection Assistant, Alan D. Russell and Aminah Fayek, CO Mar. 94, p11-33.

Combatting 'Sick Building Syndrome', CE Jan. 94, p20-

Computer - Fluent Civil Engineer: What Does It Mean? Robert M. Henry, CC Apr. 94, p1-4,6.

Construction Problem Solving in a Cooperative Distributed Agent Environment, Barry Jones and Mike Riley, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p79-87.

Developing Quality-Improvement Processes in Consulting Engineering Firms, Daniel F. Predpall, ME May/June 94,

A Goal Driven Approach to Discrete Event Simulation, Abdullah M. Alsugair and David Y. Chang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p515-522

Hurricane Andrew's Effect on Manufactured Housing, Mike Mafi, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p158-165.

Intelligent Tutoring Systems to Aid Water Treatment Plant Operators, Anthony G. Collins, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p107-114.

Mars Terraformation Revisited, Joseph Guarascio, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p774-781.

Multicriteria Optimization in Engineering Design, Andrzej Ameljańczyk, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p318-325.

Neural Networks in Civil Engineering. II: Systems and Application, Ian Flood and Nabil Kartam, CP Apr. 94, p149-162.

Partnering to Save Troubled Projects, Jim Brown, ME

May/June 94, p22-25.

Representation of Case Memory for Structural Design, Mary Lou Maher, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2030-2037.

Representing Design Cases Based on Methods, B. Raphael, B. Kumar and I. A. McLeod, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p255-292.

Wright was Wrong?, CE Jan. 94, p30.

Congress to Debate Procurement Reform, NE Jan. 94, p2. Effects of SPT Equipment and Procedures on the Design of Shallow Foundations on Sand, William D. Kovacs, (Ver-

tical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p121-131.

EPA's Regulatory Process: A New Way of Doing Business, Tudor T. Davies and Timothy J. Kasten, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p123-

How to Organize CADD Systems (Part 1), CC Jan. 94, p10-11.

Implementation of Elastic Layered Theory for Design of Unbonded Overlays, Walter R. Barker, Jim W. Hall, Jr. and Carlos R. Gonzalez, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p42-52.

The Regulatory Process - - An Industry Perspective Responding to New Regulations, Gerald A. Hapka and Robert A. Reich, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p134-144.

Review of Postconstruction Evaluation Procedures for Infrastructure Projects, Yuzo Akatsuka, ME Jan./Feb. 94, p70-75.

Process control

Effects of Design-Integrated Process Planning on Productivity in Rebar Placement, Md. Salim and Leonhard E. Bernold, CO Dec. 94, p720-738.

KBES for Process Control of Nitrification in Activated Sludge Process, Naci H. Ozgur and Michael K. Sten-

strom, EE Jan./Feb. 94, p87-107.

Measurement of Phase Compositions in Portland Cement Clinkers, F. Sorrentino, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p1-14.

A Process-Oriented Planning and Control Model for Computer-Integrated Construction, Tarek M. Attia and Leonhard E. Bernold, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1756-1763.

Process variables

Functional Analysis Using Partitioned Engineering Data Flow Model, D. H. Douglas Phan and H. Craig Howard, CP Jan. 94, p2-19.

Improving Project Management of Design, Stuart D. Anderson and Richard L. Tucker, ME July/Aug. 94, p35-

Measurement of Phase Compositions in Portland Cement Clinkers, F. Sorrentino, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p1-14.

Process Model for Public Sector Design-Build Planning, Anthony D. Songer, C. William libbs and Thomas R. Na-pier, CO Dec. 94, p857-874.

Processing

Design Basis Spent Nuclear Fuel Characteristics, Peter Gottlieb and J. Kevin McCoy, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p845-851.

Fitted Analytical Expressions Giving the Enrichment in U235 of a Fresh Fuel Equal to a Spent PWR Fuel, J. Anno, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p757-764.

Data Technology, Godfried Augenbroe, CP Oct. 94, p420-435.

Integrated Design-Process Model, Victor E. Sanvido and Kevin J. Norton, ME Sept./Oct. 94, p55-62.

Optical Waveguide Solar Energy System for Lunar Material Processing, Takashi Nakamura, Constance L. Senior, James M. Shoji and Robert D. Waldron, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1266-1277.

Repository Criticality Safety for the DOE Spent Nuclear Fuel Program, Dennis Evans and Brian Palmer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p852-859.

Robotic Options for Mining of Near-Earth Objects, Russell J. Miller and Robin R. Murphy, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p457-463.

Production engineering

Integrated Building Design Systems in Context of Product Data Technology, Godfried Augenbroe, CP Oct. 94, p420-435.

Production planning

Carbon Formation Theory for Space Oxygen Processes, Peter E. Nolan, Andrew Hall Cutler and David C. Lynch, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1199-1209.

CPM/LOB: New Methodology to Integrate CPM and Line of Balance, Saad A. Suhail and Richard H. Neale, CO

Sept. 94, p667-684.

Sept. 24, 1907-1908.

Development, Testing and Modeling of Ceramic Composites for Lunar Applications, János C. Tóth and Chandra S. Desai, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p358-367.

cu., 1994), p.336-367.
Kinetic Interpretations of First Reactivity Experiments on Lunar Basalt Samples, M. A. Gibson, C. W. Knudsen, D. J. Brueneman and H. Kanamori, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1167-1177.

Lunar ISRU: An Evolutionary Approach, John L. Paterson, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1077-1085.

Productivity

Action-Response Model and Loss of Productivity in Construction, David W. Halligan, Laura A. Demsetz, James D. Brown and Clark B. Pace, CO Mar. 94, p47-64 CAD for Small Hydro Projects, Norman A. Bishop, Jr., CE

Apr. 94, p64-66.

Can Computers 'Recession-Proof' Your Firm, ME Sept./ Oct. 94, p14-15.

Computer Benefits Can't be Measured by Productivity

Alone, ME May/June 94, p1-2. Computer Use in Claims Analysis -- Roundtable Discussion, John R. Knoke, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2136-2139.

Computer-Assisted Coal Mining — An Overview, George H. Schnakenberg, Jr., (Robotics for Challenging Envi-ronments, Laura A. Demsetz, ed. and Paul R. Klarer, ed.,

1994), p427-436

Computer-Integrated Construction and CM Firms: A Profitable Combination, Ed Ott, Matt Syal and Gary Gehrig, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1751-1755.

Conflict Management Using SHARED-DRIMS, Feniosky Peña-Mora, Duvvuru Sriram and Robert Logcher, (Com-puting in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1599-1606.

Database Use in the Engineering Office, Charles E. Bowler, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1874-1879. Demands and Satisfiers for Automation and Robotics in Construction: Differences Between Japan and the United States, Hiroshi Saito and John G. Everett, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p419-426.

Difficulties with Implementation of Goal Setting for Construction, Ahmad Hadavi and Raymond J. Krizek, ME Sept./Oct. 94, p48-54.

Effects of Design-Integrated Process Planning on Productivity in Rebar Placement, Md. Salim and Leonhard E. Bernold, CO Dec. 94, p720-738.

Estimating Construction Productivity: Neural-Network-

Estimating Constitution Frontiering: Neural-Network-Based Approach, Li-Chung Chao and Miroslaw J. Skib-niewski, CP Apr. 94, p234-251. Forecasting Labor Productivity Using Factor Model, H. Randolph Thomas and Ahmet S. Sakarcan, CO Mar. 94,

496

A Framework for a Database of Construction Costs and Productivity at the Process Level for Transportation Inrrouctivity at the Process Level for Irrasportation frastructure Development, Antonio A. González-Quevedo, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1854-1858.
Graphical-Based Productivity Transient Investigation Using DISCO, Rong-Yau Huang and Jorge A. Vanegas, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p1-8.

Interdiscipline Design Coordination Facilitated by CADD, James W. Langston, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1983-1989.

Introducing New Process Technologies into Construction Companies, Maria Laborde and Victor Sanvido, CO Sept. 94, p488-508.

Is Your Automated Information System Obsolete? Chester A. Shuman, ME Mar./Apr. 94, p24-26.

Labor-Political Factors for International Firms in Developing Regions, Enno "Ed" Koehn and Frank Atuahene, EI

Jan. 94, p41-49.
Learning Curve Predictors for Construction Field Operations, John G. Everett and Sherif Farghal, CO Sept. 94, p603-616.

Modified Roof Erection System, James D. Stevens and

Alan L. Murray, CO Dec. 94, p828-837. Multimedia Based System for Analyzing Production Organizations, Hans C. Björnsson and Per Sagert, (Conditional Conditions) puting in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1405-1411.

Roadmap to Current Benchmarking Literature, Andrew E. Jackson, Robert R. Safford and William W. Swart, ME Nov./Dec. 94, p60-67.

Robot for Interior-Finishing Works in Building: Feasibility Analysis, Abraham Warszawski and Yechiel Rosenfeld,

CO Mar. 94, p132-151.

Simulation of Learning Development in Repetitive Con-struction, James D. Lutz, Daniel W. Halpin and James R. Wilson, CO Dec. 94, p753-773.

Simulation Verifies Queuing Program for Selecting Loader-Truck Fleets, Foad Farid and Thomas L. Koning, CO June 94, p386-404.

Software Interface in Engineering Applications, Charles E. Bowler, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1880-1883.

Work Planning: Getting it Right the Second Time, CE Jan. 94, p11-12.

Professional activities

How We Falter and the Lessons We Learn, K. B. Khushalani, El Oct. 93, p422-426.

Marketing Sould Be Tasteful, Not Tacky, ME July/Aug.

Professional Involvement in Development of Expert Systems for Construction Industry, P. S. Brandon and I. D. Watson, CP Oct. 94, p507-518.

Tunnel School, Brian Brenner and Richard O'Brien, EI Oct. 94, p405-412.

Professional advancement

Admission Requirements for Non-Civil Engineering Graduate Applicants, Richard H. McCuen and Allen P. Davis, El Apr. 93, p163-169.

Creating Business-Development Talent through Mentoring, Michael Lee Smith, ME Mar./Apr. 94, p44-47.

Enhance Engineering Opportunities-or Else, CE Aug. 94,

Strategies to Enhance Well-Being of Civil Engineering Profession, Michel Bruneau, El Oct. 94, p341-359.

Professional development ASCE Board Urges Members to Continue Their Development, CE June 94, p75.

ASCE Not Alone in Advocating CPD for Its Members, NE May 94, p3.

Stage 194, 195. Business Engineer: Role for Consulting Civil Engineer in Year 2000, Mel Sears, ME Mar/Apr. 94, 1935-38. Computer - Fluent Civil Engineer: What Does It Mean? Robert M. Henry, CC Apr. 94, pl -4.6.

Creating Business-Development Talent through Mentor-ing, Michael Lee Smith, ME Mar./Apr. 94, p44-47.

Improving Effectiveness of Equal Business Opportunity Programs, Zuhair El-Itr and Roozbeh Kangari, El July 94, p295-312. Proactive Career Management, Glenn E. Schirmer, ME

Jan./Feb. 94, p33-36.

Professional Development? Invest in the Profession (ltr), CE June 94, p32

Professional Development? Raise Salaries (1tr), CE Feb. 94, p32,35.

Professional engineering

Educating A Structural Engineer, J. A. Bohinsky and J. P. Lee, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1352-1357.

Qualification System for Building Engineers in Korea, Li-Hyung Lee and Waon-Ho Yi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p215-220

Professional personnel
Face to Face, WP Special issue 94, p5.

Professional practice
Application of Structural Optimization, M. Z. Cohn and A. S. Dinovitzer, ST Feb. 94, p617-650.

Constructivist Learning Model for Ethics Education, Richard H. McCuen, El July 94, p273-278.

Contemporary Model of Civil Engineering Failures, Richard L. Meehan, Brian Chun, Sang-wuk Ji, Stephanie King, Knut Ronold and Frank Yang, El Apr. 93, p138-146.

Design—Cornerstone of Your Career: Advice for Young Engineers, Rodney Attwood, El July 94, p241-245. Digger's Decline: A Fable for Civil Engineers, John A. Al-

exander, EI July 93, p304-308.

Dispute Avoidance and Resolution for Consulting Engineers, Richard K. Allen, 1993, 0-87262-903-1, 85pp.

Engineers and Leadership: How to Move up "Economic Food Chain", Richard G. Weingardt, El Jan. 94, p50-57. Ethics and Quality in the Constructed Project, Jerome S. B. Iffland, El Jan. 94, p8-24.

Failure as Source of Engineering Judgment: Case of John Roebling, Henry Petroski, CF Feb. 93, p46-58.

Human Factors in Civil and Geotechnical Engineering Failures, George F. Sowers, GT Feb. 93, p238-256. The Importance of Being Historical: Civil Engineers and Their History, Jane Morley, El Oct. 94, p419-428.

Improving Project Management of Design, Stuart D. Anderson and Richard L. Tucker, ME July/Aug. 94, p35-44.

Integrated Capstone Design Experience, Everett E. McEwen, El Apr. 94, p212-220.

Is it Necessary to Compromise Engineering Ethics to Remain Competitive in Today's Marketplace? D. Michael Mucha, CE May 94, p62-63.

Liability Insurance for Design Professionals: Can't Live With It, Can't Live Without It? Robert A. Rubin, ME Mar./Apr. 94, p18-23.

Organizational Attitudes of Senior Professionals, George Bennett and John Whittaker, ME May/June 94, p35-40. Quality-Measurement Matrix, James D. Stevens, Charles Glagola and William B. Ledbetter, ME Nov./Dec. 94,

p30-35. Restructuring the Engineering and Engineering Technology Relationship, Russel C. Jones and Robert D. Kersten, El Apr. 93, p153-162. Standard of Care in Civil Litigation, Robert W. Day, EI Apr. 94, p145-148.

Survey of Stormwater Detention State of Practice, Ben R. Urbonas, Jay Carlson and L. Scott Tucker, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p873-876.

The Winds of Change? Paul Tarricone, CE Jan. 94, p42-45

Professional registration

Strategy for Passing the Civil P.E. Exam, John G. Everett and James T. Mitroka, El July 93, p269-278.

Professional role

Conflict Between Professionalism and Political Responsiveness, Robert W. Brannan, El Jan. 94, p36-40. The Declaration of Codependence, CE Aug. 94, p8.

Ethical Responsibilities of Engineering Profession, Mark J. Holliday, El July 94, p270-272.

Facilitating Sustainable Development: Role of Engineer, Geoffrey H. Coates, El July 93, p225-229.

Future Concerns in Environmental Engineering Graduate Education, Richard G. Luthy, David A. Bella, James R. Hunt, James H. Johnson, Desmond F. Lawler, Charles R. O'Melia and Frederick G. Pohland, El Oct. 92, p361-

Geo-engineering: a Vision for the 21st Century, CERF report #94-5020, Civil Engineering Research Foundation, 1994, 0-7844-0042-3, 48pp.

How We Falter and the Lessons We Learn, K. B. Khushalani, El Oct. 93, p422-426.

Professional Involvement in Development of Expert Sys-tems for Construction Industry, P. S. Brandon and I. D. Watson, CP Oct. 94, p507-518.

Strategies to Enhance Well-Being of Civil Engineering Profession, Michel Bruneau, El Oct. 94, p341-359.

Why Do Engineers Wear Black Hats? P. Aarne Vesilind, El Jan. 93, p1-7.

Professional services

Identifying Causes of Failure in Providing Geotechnical and Environmental Consulting Services, Douglas C.
Moorhouse and Richard A. Millet, ME May/June 94, p56-64.

Making the Most of Marketing, William F. Peck, ME Nov./Dec. 94, p17-21.

Procurement Issues, Delon Hampton, ME Nov./Dec. 94. p45-49.

Seminars: A Tool for Marketing Professional Services, Scott C. Gladden, Karen S. Nakhjiri and Shawn R. T. Severn, ME Jan./Feb. 94, p14-18.

Professional societies

Ethics and Quality in the Constructed Project, Jerome S. B. Iffland, El Jan. 94, p8-24.

Incorporating Stakeholder Values in Systems Engineering Decision Making, Philip M. Altomare, Michael L. Grygiel and Bernard G. Morais, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1762-1769.

Stakeholder Involvement in System Architecture Decisions, Dwight Shelor and Ruane Langton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1609-1613.

Stakeholder Involvement in the Evaluation of a Multipurpose Canister System, Susan Smith, Pete Bolton and Tim Dantoin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p314-1-314-6.

Profile measurement

Breaking Wave Persistence in Parametric Surf Zone Models, Howard N. Southgate and Helen M. Wallace, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p543-

The Delta Flume'93 Experiment, A. S.-Arcilla, J. A. Roelvink, B. A. O'Connor, A. Reniers and J. A. Jiménez, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p488-502.

Verification of the Shearstress Boundary Conditions in the Undertow Problem, Marcel J. F. Stive and Huib J. De Vriend, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p533-542.

Profiles

1988 Armenia Earthquake. II: Damage Statistics Versus Geologic and Soil Profiles, M. K. Yegian, V. G. Ghahraman and G. Gazetas, GT Jan. 94, p21-45.

Application of a Parametric Long Term Model Concept to the Delray Beach Nourishment Program, Michele Capo-bianco, Huib J. De Vriend, Robert J. Nicholls and Marcel J. F. Stive, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p391-401.

Automated Surface Wave Method: Inversion Technique, Deren Yuan and Soheil Nazarian, GT July 93, p1112-1126.

Modeling of Dissolved Ozone Concentration Profiles in Bubble Columns, Hongde Zhou, Daniel W. Smith and S. J. Stanley, EE July/Aug. 94, p821-840.

The TMA Wave-Energy Constraint and Cohesive Shore-Profile Shapes, Charles N. Johnson, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p236-250.

A Primer for Financial Management of Small Consulting Firms, H. Edmund Bergeron, ME Mar./Apr. 94, p28-34.

Programming

Description of the Application of Goal Programming for Selective Withdrawal Structure Operation, D. G. Fontane and M. L. Schneider, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p400-403.

Ship Fabrication Innovations (Naval & Commercial), Ravmond H. Juers and Kevin Lynaugh, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p344-350.

Programs

A Comparative Study of U.S. and Russian High-Level Waste Repository Design Concepts, Z. T. Bieniawski and E. V. Kuzmin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p515-522.

Concept and Programme "Radioactive" Waste Disposal in Geological Formations of Ukraine, D. P. Khrushchov, M. P. Umanets and Eu. A. Yakovlev, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p2305-2309.

Czech Program of Underground Repository for ILW and HLW Radioactive Wastes, Michal Vanecek, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2310-2314.

The Development of a Wave Data Analysis Standard for a National Wave Measurement Program, Michael Tubman, Marshall Earle and David McGehee, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p547-553.

The IAEA's High Level Radioactive Waste Management Programme, D. E. Saire, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2279-2283.

Interfaces and interactions in the Swiss Waste Disposal Programme, C. McCombie, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p238-248.

An International Approach to Radioactive Waste Management, John W. Bartlett, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p26-29.

NEPA Implementation: The Department of Energy's Program to Manage Spent Nuclear Fuel, Dillard B. Shipler, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1532-1537.

Overview and Status of NRC's High-Level Waste Repository Program, Mark S. Delligatti, Joseph J. Holonich and B. J. Youngblood, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1597-1603.

Overview of the Spanish High Level Radioactive Waste Programme, A. López and A. R. Beceiro, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2284-2290.

A Process for Integrating Public Involvement Into Techni-Process for Integrating Public Involvement Into Techni-cal/Social Programs, Susan Wiltshire and Carol Williams, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p275-279.

Secretary of Energy Review of the Civilian Radioactive Waste Management Program, Christopher A. Kouts, Allen B. Benson and Patricia Van Nelson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p9-12.

Site Characterisation and Performance Assessment in the Swiss Nuclear Waste Disposal Programme: Benefits from the Second NAGRA/USDOE Project Agreement, S. Vomvoris, P. Zuidema and P. Blümling, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2616-2623.

Space Exploration: Getting a Handle on "Why?", Gordon R. Woodcock, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p960-968.

The Spent Fuel Disposal Program in Taiwan, K. K. Li, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

Technical and Institutional Features of High-Level Radioactive Waste Management: Searching for Common Ground, Tom Isaacs, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p263-266.

Testing the Spatial Neutrality of the REMI Net Migration Equation, Charles F. Barr, Nasser Daneshvary, Thomas A. Perrigo and Dan S. Rickman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p40-47.

What's Science Got To Do With It?: The Use of Public Opinion in Developing Nuclear Waste Policy, Eric B. Herzik and John L. Dobra, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p112-120.

Progressive failure

Dynamic Effects of Progressive Member Failure on the Response of Truss Structures, Ramesh B. Malla, Baihai Wang and Butchi B. Nalluri, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p60-76.

Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993, 0-87262-946-5, 165pp.

The Effect of Member Snap on Progressive Collapse of Space Structures, Nicholas F. Morris, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p17-31.

Investigation of L'Ambiance Plaza Building Collapse, Daniel A. Cuoco, David B. Peraza and Thomas Z. Scarangello, CF Nov. 92, p211-231.

Resistance Mechanisms in RC Building Frames Subjected to Column Failure, Haluk Sucuoğlu, Ergin Çıtıpıtıoğlu and Sinan Altın, ST Mar. 94, p765-782.

Response of Truss Structures Subjected to Dynamic Loads During Member Failure, Ramesh B. Malla and Butchi, B. Nalluri, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p249-258.

Structural Integrity of Space Trusses, Erling Murtha-Smith, Anurag Chaturvedi and Shawn F. Leary, (Spatial, Lat-tice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p409Project control

Applying Multimedia Technology to Project Control, L. Y. Liu, A. L. Stumpf and S. S. Kim, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p608-613.

Beyond CPM: The Deck-of-Cards Paradigm, Francois Grobler, K. Praveen Reddy and Carol Subick, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2046-2053.

Forecasting Labor Productivity Using Factor Model, H. Randolph Thomas and Ahmet S. Sakarcan, CO Mar. 94,

p228-239 Light at the End of the Chunnel, Virginia Fairweather, WP Special issue 94, p10-13.

Partnering to Save Troubled Projects, Jim Brown, ME May/June 94, p22-25

A Primer for Financial Management of Small Consulting Firms, H. Edmund Bergeron, ME Mar./Apr. 94, p28-34.

Project evaluation

Checklist of Critical Success Factors for Building Projects, M. K. Parfitt and V. E. Sanvido, ME July 93, p243-249.

Constructability Programs: Method for Assessment and Benchmarking, James T. O'Connor and Steven J. Miller, CF Feb. 94, p46-64.

Critical Analysis of Time and Cost of Management and Traditional Contracts, Shamil G. Naoum, CO Dec. 94, p687-705.

Evaluating Multi-Purpose Reservoir Operations Using Valuating Multi-Purpose Reservoir Operations Using Fuzzy Dynamic Programming, Enrique Moncada, Darrell G. Fontane and Timothy K. Gates, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p111-114.

Measuring the Benefits of Flood Risk Reduction, Leonard Shabman, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p122-135.

Review of Postconstruction Evaluation Procedures for Infrastructure Projects, Yuzo Akatsuka, ME Jan./Feb. 94, p70-75.

Project feasibility

Aquifer Storage and Recovery in the Floridan Aquifer Sys-tem of South Florida, Albert Muniz and William B. Ziegler, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p69-72.

Computer Simulation Model of the Integrated Local Water Supply Plan for the City of Wichita, Kansas, Jerry Blain, Gene Foster, Jeff Klein and Frank Shorney, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p734-737.

Cooperative Game Theory in Water Resources, Morris Israel, Jay R. Lund and Gerald T. Orlob, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p569-572.

Denver's Direct Potable Water Reuse Demonstration Project, William C. Lauer, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p657-660.

Water Resources Development in the 1990's: A New Process, Peter D. Binney, Lawrence H. Roth and Daniel D. Heagerty, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p822-825.

Willingness and Ability to Pay for Rural Water, Jonathan Platt and Steven Piper, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p157-160.

Project management

Airport Terminal Design Challenges, Daniel J. Feil, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p18-25.

Aspects of Virtual Master Builder, Victor E. Sanvido, Steven J. Fenves and John L. Wilson, EI July 92, p261-

Barriers to Constructability Implementation, James T. O'Connor and Steven J. Miller, CF May 94, p110-128.

Business Engineer: Role for Consulting Civil Engineer in Year 2000, Mel Sears, ME Mar./Apr. 94, p35-38.

Capturing As-built Project Information for Facility Management, L. Y. Liu, A. L. Stumpf, S. S. Kim and F. M. Zbinden, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p614-621.

Choosing Appropriate Construction Contracting Method, Christopher M. Gordon, CO Mar. 94, p196-210.

Comparative Analysis of Three Constructability Approaches, Jeffrey S. Russell, John G. Gugel and Michael W. Radtke, CO Mar. 94, p180-195.

Computer Automation and Project Organizational Impact: A Conceptual Model, Stuart Anderson and Suresh Ketha, (Computing in Civil Khozeimeh, ed., 1994), p498-501. in Civil Engineering,

Constructability Programs: Method for Assessment and Benchmarking, James T. O'Connor and Steven J. Miller,

CF Feb. 94, p46-64.

CPM/LOB: New Methodology to Integrate CPM and Line of Balance, Saad A. Suhail and Richard H. Neale, CO Sept. 94, p667-684.

Database Use in the Engineering Office, Charles E. Bowler, (Computing in Civil Engineering, Khalil Khozeimeh,

et, (Computing in Critisangue Land, 1994), p1874-1879.
The Design of a Proactive Cost Feedback System for Construction Project Management, David N. Ford and Fenior Child Child Feningaring Khalil sky Pena, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1365-1372.

Developments to the IRMA Model of AEC Projects,

Thomas Froese, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p778-785. Dredging of Fishing Harbour, Walvis Bay, Keith Mackie, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1037-

Durable Concrete, Bryant Mather, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p52-63. Emergency Repairs for Storrow Drive Tunnel, Paul L. Kel-

ley, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1103-1110.

Engineering Management and Project Triangle, John C. Bishop and E. Casey Madden, ME July/Aug. 94, p24-

Environmental Monitoring and Mitigation: Harbor Tunnel Dredging and Disposal Operations, Boston, Massachusetts, Curtis A. Meininger and Alan D. Randall, (*Dredg*ing '94, E. Clark McNair, Jr., ed., 1994), p1471-1480. Establishing Management Information Systems for Mul-

tiproject Programs, Russell Zapalac, Karen Kuemmler and Tim Malagon, ME Jan./Feb. 94, p37-42. Ethics and Quality in the Constructed Project, Jerome S. B.

Iffland, El Jan. 94, p8-24.

Geometric-Based Reasoning System for Project Planning, A. A. Morad and Y. J. Beliveau, CP Jan. 94, p52-71. Group Dynamics and Construction Project Manager, Pan-

taleo D. Rwelamila, CO Mar. 94, p3-10.

Implementation of Spent Fuel Storage Options - A Utility Project Engineers Perspective, Steven M. Unikewicz, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p370-374.

Improvements Needed in Geosynthetics Design and Construction, CE June 94, p6.

Improving Project Management of Design, Stuart D. Anderson and Richard L. Tucker, ME July/Aug. 94, p35-

The Inflation Equation, Joao Otavio Brizola and Paul C. Dinsmore, WP Special issue 94, p41-44.

An Integrated Approach To Repetitive Construction Planning, Boliver A. Senior and Daniel W. Halpin, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p25-32.

Integrated System for Managing Owner-Directed Project Acceleration, Nagui I. Riad, David Arditi and Jamshid Mohammadi, CO Mar. 94, p77-95.

Interactive Decision Support System for Building Con-struction Scheduling, K. E. E. Kähkönen, CP Oct. 94,

Interdiscipline Design Coordination Facilitated by CADD, James W. Langston, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1983-1989. International Information and Technology

Transfer, Charles G. Gunnerson, El Oct. 91, p336-350.

Light at the End of the Chunnel, Virginia Fairweather, WP

Special issue 94, p10-13.

Machine learning Applications for Automated Constructa-bility Reviews, Kamolwan Lueprasert and Miroslaw J. Skibniewski, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p893-900.

Knozetinen, ed., 1994), pos-9-00.
 Management Information System Application on a Multi-Million Overseas Project, Gamil F. Fanous and Mufid F. Samara, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2157-2174.
 Managing Uncertainty in Project Planning and Execution: Introduction and Overview, Guru N. Rao, Francois Gro-

bler and Liang Y. Liu, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p33-40.

A New Automated System for Decision Support in the Construction Industry, M. J. Riley and C. J. Pickering, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p523-530.

Object-Oriented Process Modeling to Support Cooperative Planning in Industrialized Building Construction Project, Yusuke Yamazaki, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p998-1005.

Partnering in Small Packages, Gary D. Bates, ME Nov./ Dec. 94, p22-23.

Partnering to Save Troubled Projects, Jim Brown, ME May/June 94, p22-25.

A PC-Based Stochastic Project Scheduling and Costing Module, Kamalain K. Sha'ath and Gurdev Singh, (Computing in Civil Engineering, Khalil Khozeimeh, ed.,

1994), p9-16. Practical Approach to Cope with Construction Cost Uncertainty in an Inflationary Environment, Diego Echeverry and Jorge Garcia, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2149-2156.

Precepts of Project Management, David J. Kerkes, CE Sept.

94, p70-72. Project Management Software: Putting It Through the Paces, Julie Hart, CC Jan. 94, p8-9.

Quality Assurance for Hazardous-Waste Projects, N. S. Shashidhara, CE Dec. 94, p66-68.

Quality Performance on Successful Project, W. B. Ledbet-

ter, CO Mar. 94, p34-46.
Representation of Vertical Constraints Knowledge for Scheduling Multi-Story Projects, Walid Y. Thabet and Yvan Beliveau, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p349-355.

Simplified Simulation Model Development for Construction Projects, Amr A. Oloufa, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p362-367.

Software Interface in Engineering Applications, Charles E. Bowler, (Computing in Civil E Khozeimeh, ed., 1994), p1880-1883. Engineering, Khalil

Sustainable Competitive Advantage for Project-Management Consultants, Martin Betts, ME Jan./Feb. 94, p43-51. Team-Building Process: Key to Better Project Results, Robert Albanese, ME Nov./Dec. 94, p36-44.

To Boldly Go...On Line, CC May 94, p8-9.

Water 2050-Supply for the Portland, Oregon Metropolitan Region Using the Integrated Resource Planning Process, Lorna Stickel, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p230-233.

What Do Project Managers (need to) Know About CADD? Stephen M. Benz, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1884-1891.

Project planning

Airport Reconstruction/Rehabilitation: A Case Study, Steven B. Cornell, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p516-

Case Storage of Planning Knowledge for Power Plant Construction, Ren-Jye Dzeng and Iris D. Tommelein, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p293-300.

Checklist of Critical Success Factors for Building Projects, M. K. Parfitt and V. E. Sanvido, ME July 93, p243-249.

Community Partnering in Accelerated Construction Program, Leslie R. Henley, UP June 94, p74-86.

Computer-Assisted Planning, Programming, Budgeting System (CAPPB), Bruce C. Goettel, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p390-395.

Cost Considerations in Planning Pier Terminals, E. S. Dada and S. C. Wirasinghe, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p183-192

Design/Build Prequalification System, Kevin J. Potter and Victor Sanvido, ME Mar./Apr. 94, p48-56.

Development of a Geographical Information System for On Farm Management, Malinda Fowler, Don R. May, Omnia El-Hakim, A. Bennally, A. Johnson, S. Spaulding, Wilson Begay and Timothy K. Gates, (Water Policy and Management: Solving the Problems, Darrell G.

Fontane, ed. and Harry N. Tuvel, ed., 1994), p132-135. Development of an Intergovernmental Agreement For a Major Multi-Party Recharge Project in Central Arizona, Richard S. Siegel, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p533-536.

Effective Project Planning Techniques, Christian A. Jensen, CE Feb. 94, p66-67.

Environmental Campus for EPA, Tod Rittenhouse, CE Oct. 94, p54-57. Geometric-Based Reasoning System for Project Planning,

A. A. Morad and Y. J. Beliveau, CP Jan. 94, p52-71. An Integrated Computer Model for Project Schedule Updating, Walid Y. Thabet and Ayman A. Morad, (Computing in Civil Engineering, Khalil Khozeimeh, ed.,

paining in Citie Engineering, Khaili Khozelineli, ed., 1994), p743-750. Integrated System to Develop Highway Rehabilitation Projects, Sarosh I. Khan, Stephen G. Ritchie and Karl Kampe, TE Jan/Feb. 94, p1-20.

Interactive Decision Support System for Building Con-struction Scheduling, K. E. E. Kähkönen, CP Oct. 94, p519-535.

The Key is Constructability, William J. Schmitz and Theo-dore von Rosenvinge, IV, CE Aug. 94, p54-56.

offe von Rosenvinge, IV, Laug. 24, 1924-193. Linguistic Analysis of Risk in Project Planning, Roozbeh Kangari and Moataz Bakheet, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p216-219. Menaging Uncertainty in Project Planning and Execution: Introduction and Overview, Guru N. Rao, Francois Gro-bles and Lings V Lin (Computing in Civil Engineering).

bler and Liang Y. Liu, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p33-40. Marina Ashdod, Israel - An Investor's Turn-Key Project Design, Rami Raviv, (Marinas, Parks and Recreation

Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p244-247.

Market Analysis of Marinas and Market Potentials in Asian Regions, Ronald E. Schults, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A.

Klancnik, ed., 1994), p238-243. MIS Links Personnel Projects, Proposals, ME Mar./Apr. 94, p3.

Multiple Use Pier Facilities in Parks, Jim Posda and Jon Guerry Taylor, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p414-423.

On "Solid" Golden Pond, Ronald J. Arceneaux and Dale L. Watson, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p170-179.

Process Model for Public Sector Design-Build Planning, Anthony D. Songer, C. William Ibbs and Thomas R. Napier, CO Dec. 94, p857-874.

Redefining Public Involvement, Dennis J. Unsworth, ME July/Aug. 94, p13-15.

Risk-Based Management of Uncertainty During Project Planning and Execution, Angel L. Rivera and Juan J. Ferrada, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p384-389.

The San Gorgonio Pass Water Project, Richard B. Bell, Aladdin Shaikh and Stephen P. Stockton, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p73-76.

SCHEREC: SCHedule RECovery System, Feniosky Pena, Robert Logcher, Naoto Mine and Timothy McManus, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p17-24.

Setting up CADD Right, Susanna C. Smith, CC May 94, p10-11.

Startplan: Producing Schedule Templates Using IRMA, Thomas Froese and Qiang Kevin Yu, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p63-

Streamlining Project Estimating and Scheduling, David Angelotti, CC Feb. 94, p11-13

TIGER and Census Bureau Data in a GIS: A Powerful Combination for Civil Engineers, Robert W. Marx, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p225-232.

Using Computer Programs to Develop As-Built Schedules, Jason M. Jazayeri, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p191-196.

Water 2050-Supply for the Portland, Oregon Metropolitan Region Using the Integrated Resource Planning Process, Lorna Stickel, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p230-233.

Project selection

Governmental Priorities in Irrigation Project Selection in Indonesia, Sutardi and I. C. Goulter, WR May/June 93,

Quantifying Flood Damage Uncertainty, David A. Moser, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p201-218.

Project specifications

Engineering Management and Project Triangle, John C. Bishop and E. Casey Madden, ME July/Aug. 94, p24-

Microtunneling Arrives in San Diego as an Attractive Al-ternative to Open Trenching, William J. Swallow, III, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p896-903.

Projects

Alternative Designs for a Water Resources Planning and Management Electronic Information Exchange Network, Quentin W. Martin, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p690-693.

Casino Construction All Aces in Las Vegas, CE Feb. 94,

Cladding Goes Over Eggs Easy, CE Feb. 94, p77. Conflict Management Using SHARED-DRIMS, Feniosky Peña-Mora, Duvvuru Sriram and Robert Logcher, (Com puting in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1599-1606. Contractor Entitled to Recover Damages from Project

Lender, CE May 94, p30.

Cost-Schedule Integration for Cash-Flow Forecasting Ronie Navon, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1536-1539.

Demonstration Project for Scour Instrumentation, J. D. Schall, W. R. Ivarson and T. Krylowski, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p37-42.

Denver Park Withstands the Test of Time, CE Feb. 94,

Grazing for Funding: Agency Hydrodiplomacy, C. M. Rogers and J. E. Robinson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p561-564.

GSA Takes the Lead in Metric Construction, NE Jan. 94, p15.

How do Integration and Data Models Add Value to a Project? Martin Fischer, Thomas Froese and Douglas Phan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p992-997.

Innovative Introduction to Civil Engineering Curriculum, E. F. Glynn and W. B. Fergusson, El Apr. 94, p149-157. Model for Constructability Approach Selection, John G.

Gugel and Jeffrey S. Russell, CO Sept. 94, p509-521. Monitored Retrievable Storage (MRS) Facility Project Status, Ronald A. Milner, Victor W. Trebules and James B. Blandford, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1358-1364.

Overview of the Spanish High Level Radioactive Waste Programme, A. López and A. R. Beceiro, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2284-2290.

Prototype Applications of Integrated Data Models in Construction, M. Betts, P. Brandon, T. Child, G. Cooper and J. Kirkham, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p988-991.

The Rest of the Best, Josh Kosman, CE July 94, p44-48.

Roof-Project Coordinator Recalls Good Times (ltr), CE Apr. 94, p35.

Systems Engineering Applied to the Development of the Yucca Mountain Project Design Requirements Documents, M. Sam Rindskopf and Dennis C. Royer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1634-1640

Three-dimensional Modeling for Improving Construction Process Performance, Amarjit Singh, (Computing Civil Engineering, Khalil Khozeimeh, ed., 1994), p1156-1163.

Use of Database in Geo-environmental Engineering, Amin Rahman and Thomas J. Moynahan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1251-

Valuation Analysis for Independent Power Project, Richard K. Ellsworth, EY Aug. 94, p86-96.

Propellants

A Comparison of Propulsion Systems for Space Exploration, Ryan D. Hoover, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p751-755.

Propulsion Systems for Future Space Exploration, Michael B. Delclos, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley

Lokaj, ed., 1994), p765-768.

Resource Recovery Facilities for Earth Approaching Com-ets, Thomas C. Taylor, Anthony C. Zuppero and Lucy-Ann McFadden, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p562-571.

Properties

Erosion Hazards and Coastal Construction Deficiencies Observed on Kauai After Hurricane Iniki, A. Todd Davison, Charles E. Bornman and Melvin Nishihara, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p736-745

Owners Buy Use Along With Property, CE Apr. 94, p27.

Redefining the Roles Insurers and Engineers Play in Hurricane Preparedness and Mitigation, Eugene L. Lecomte, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p1-9.

Protective coatings

Dual Purpose Pipeline in the 1900s Environment, Randall C. Hill and Javier Saunders, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p119-128.

Internal Pipeline Corrosion Coatings Case Studies and Solutions Implemented, Ronald E. Carlson, Jr., (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p206-211.

Sealant Coats Building During Windy City Winter, CE Feb. 94, p77.

Protective structures

Alternatives for Overtopping Protection of Dams, Task Committee on Overtopping Protection of the Hydraulics Division of the American Society of Civil Engineers, (Noel R.(Randy) Oswalt, chmn.), 1994, 0-7844-0004-0, 140pp.

Protection Against Scour at SAF Stilling Basins, Charles E. Rice and Kem C. Kadavy, HY Jan. 93, p133-139.

Protocols

Evaluating Activated Sludge Secondary Clarifier Performance: A Protocol, E. J. Wahlberg, M. Augustus, D. T. Chapman, C. Chen, J. K. Esler, T. M. Keinath, D. S. Parker, R. J. Tekippe and T. E. Wilson, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p.209-216.

Prototype tests

Energy Dissipation and Sediment Transport in Large Scale Tests, H. Rahlf and Y. Wu, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p742-754.

Fiber-Glass Composite Aircraft Pad for Crop Dusting, Srinivasa L. Iyer, Vijayakumar Ranganathan and Terry Gross, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p743-750.

Field and Prototype Measurements for Numerical Coastal Modelling, Hans-H. Dette, Jürgen Newe and Yongjun Wu, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p129-142.

Quest for the Perfect Cap, N. Richard Wing and Glendon W. Gee, CE Oct. 94, p38-41.

Prototypes

A+Prototypes: Concept for Individual Support in Tools for Building Design, Angelika Drach, Sandro Heitz and Markus Langenegger, CP Oct. 94, p489-506.

Analysis of Selected Prototype Wave and Runup Data, Todd L. Walton, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p913-917.

BRICAL: A Multimedia Intelligent Educational System for Bridge Engineering, Amin Hammad and Yoshito Itoh, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1671-1678.

Construction Expertise Transfer with Knowledge Based Systems, Hans Björnsson and Bjarni P. Hjaroar, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p964-971.

Development of a Knowledge-Based System for Sanitary Landfill Design, H. Basri and E. I. Stentiford, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1257-1264.

Integrating Computer Application for Pavement Management: A Case Study, Dimitri A. Grivas, B. Cameron Schultz and Richard Garrabrant, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1951-1958.

Model-Prototype Conformance of a Submerged Vortex in the Intake of a Vertical Turbine Pump, K. Warren Frizell, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p482-489.

Modeling to Generate Alternatives in Discrete Structural Optimization, John W. Baugh, Jr., E. Downey Brill, Jr. and Shannon C. Caldwell, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p310-317.

Prototype Applications of Integrated Data Models in Construction, M. Betts, P. Brandon, T. Child, G. Cooper and J. Kirkham, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p988-991.

Prototype to Product - Challenge and Frustrations, Ian F. C. Smith, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1695-1702.

Voice Operated Information System (VOIS) for Electronic Pages Information System, Prasuna DVG Reddy, Ryuichi Kitamura and Paul P. Jovanis, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1524-1531.

Pseudodynamic method

Applicability of Pseudo-force method to Highly Nonlinear Dynamic Problems, Satish Nagarajaiah and Andrei Reinhorn, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p165-172.

Performance Parameters for Pseudodynamic Tests, Chris Thewalt and Mauricio Roman, ST Sept. 94, p2768-2781.

Psychrometers

Evaluation of a 6-Wire Thermocouple Psychrometer for Determination of In-Situ Water Potentials, Carole L. Loskot, Joseph P. Rousseau and Mark A. Kurzmack, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2084-2091.

Public access

The Evolving Role of Marinas as Public Marine Parks and Water Recreation Areas in Southern California 1960-1994, John C. Corrough, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p39-48.

Taking Trash Out of Hiding, Keith R. Connor, R. Chris Brockway and Bruce E. Henning, CE Feb. 94, p40-43.

Public benefit

Administering a Regulated Riparian System of Water Rights, Joseph W. Dellapenna, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p881-884.

Public buildings

Fabric Structures for Public Buildings, Horst Berger, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p583-591.

Public health

Advertising Public Outreach: Going Where the People Are, Douglas Bradford and Daniel Burns, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p76-82.

Cultivating Stakeholder Interaction in Emergency Management, Wallace J. Weaver and Loretta F. Brownell, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p188-192.

A Health Risk Based Approach for HLW Repository Environmental Protection Criteria, R. F. Williams, R. L. Yang, R. McGuire and R. E. Wilems, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1435-1450.

Integration of Regulations and Science for HLW Disposal, Lawrence D. Ramspott, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p292-295.

Models for Source Term, Flow, Transport and Dose Assessment in NRC's Iterative Performance Assessment, Phase 2, Timothy McCartin, Richard Codell, Robert Neel, William Ford, Rex Wescott, John Bradbury, Budhi Sagar and John Walton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1469-1479.

Protecting Human Health: Keeping Science in Risk Assessment and Balance in Risk-Based Regulations, Robert G. Tardiff, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p96-106.

Standards for High Level Radioactive Waste Repositories, Dade W. Moeller, Martin J. Steindler, Paul W. Pomeroy and William J. Hinze, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), pl417-1421.

Uniform State Registration and Permitting For High-Level Radioactive Waste Transportation, James B. Reed, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p158-162.

Public information programs

Advertising Public Outreach: Going Where the People Are, Douglas Bradford and Daniel Burns, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p76-82.

Celebrating Engineers Week, Chicago-Style, CE May 94, p74.

A Critically Educated Public Explores High Level Radioactive Waste Management, Jane E. Blum, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p224-231. Decision Aids for Enhancing Intergovernmental Interac-tions: The Prenotification Analysis Support System (PASS), Marcus Lester, Edward Liebow and Judith Holm, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p168-175.

Developing a Public Involvement Policy for the Civilian Radioactive Waste Management Program, Susan Smith, Mary E. Gleason, Jane Summerson and Patricia Catherwood Reyes, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p176-181.

Egg-Drop Contest Delayed By Weather, CE May 94, p74. A Good Newsletter is Like the Perfect Employee, ME

Mar./Apr. 94, p2.

Growing Interest, Growing Programs, Growing Pains: Successfully Customizing Public Outreach, Mindy Wadkins, Carleen Hill and Theresa Hirsch, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p232-237.

Interactive Models for the Regulation of Lake Ontario, Anthony J. Eberhardt, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

Marketing Sould Be Tasteful, Not Tacky, ME July/Aug.

94, p10.

A New Approach to Water Education: Children's Water Festivals, Darell D. Zimbelman and Brian R. Werner, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p762-765.

Public Involvement and Participation: Planning Imperatives for the Coming Century, Evan Vlachos, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p859-

Public Participation in Enviornmental Issues in Taiwan, K. K. Li, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p193-200.

The Role of SEAOH in the Post-Iniki Rebuilding and Recovery Effort, Howard K. C. Lau and Michael K. H. Yee, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p278-283. Technology Information Transfer in Public Outreach: A

New Approach, John H. Peck and Mindy L. Wadkins, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p92-97

Public land

New Problems in Ground & Water Lease Administration, Allan D. Kotin and Faith F. Backus, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p154-161.

Public opinion

Analyzing Mass Perceptions of Nuclear Politics: Puzzling Over Trust, Hank C. Jenkins-Smith, Deborah A. Pratt and Gilbert W. Bassett, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p131-135.

Civil Engineering and Civic Monuments: The Commis sioning, Design and Public Perception of Urban Infrastructure Projects, Anthony C. Webster, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p1244-1249.

1994), p1.244-1249.
1994), p1.244-1249.
A Critically Educated Public Explores High Level Radioactive Waste Management, Jane E. Blum, (High Level Radioactive Waste Program Committee, 1994), p224-231.
Differentiating the Experience of Boater "Publics", Ellen B. Drogin, Andrew Holdnak, Alan R. Graefe and James M. Falk, (Marinas, Parks and Recreation Developments, Marshall Elue ed. and Fred A. Klapenik ed. 1994). Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p132-139

Enhance Engineering Opportunities-or Else, CE Aug. 94,

Environmental Mediation and Open-Water Disposal, Joseph D. Germano, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p160-169.

EPA's Public Consultation and Communications Needs Assessment for Its WIPP Outreach Program, Amy M. Newman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p88-91.

Facilitating Sustainable Development: Is Our Approach Correct? Michael N. T. Cottell, El July 93, p220-224.

Formulation of the Interagency Coordination Team for the Houston-Galveston Navigation Channels, Texas Project, Dalton H. Krueger, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p378-383.

Making Sense of a Sensitive Issue, Stan Reid, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p217-223.

Nuclear Word Images as Policy Instruments, Janet S. Conary and Dennis L. Soden, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p121-130.

On the Benefits of an Integrated Nuclear Complex for Nevada, James A. Blink and William G. Halsey, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p18-25

One Mans View of Dredging Equipment 2020, Gerald E. Greener, (Dredging '94, E. Clark McNair, Jr., ed., 1994),

p683-689

Public Opinion Polling and the Yucca Mountain Controversy: A Seven Year Inventory (12/86-8/93), Jeffery J. Himmelberger and Mike L. Baughman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p142-149.

Public Perceptions of Fresh Water Issues, Robert E. O'Connor, Richard J. Bord and Ann Fisher, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv,

ed., 1994), p155-174.

Raising Students' and Educators' Awareness of Radioactive Materials Transport Through Creative Classroom Materials and Exhibits, Judith Holm, Cheryl Sandoz, Jennifer Dickenson, Anne Marie Smith and Jan Cortelyou Lee, (High Level Radioactive Waste Manage-ment, High Level Radioactive Waste Program Committee, 1994), p213-216.

Toward Integrated Design of Waste Management Technologies, Sam A. Carnes and Amy K. Wolfe, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p267-274.

Understanding the Uses of History in Water Resources Planning and Management, Loretta C. Lohman, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p505-508.

Urban Versus Rural Risk Perception Relating to High-Level Nuclear Waste, Dennis L. Soden, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p136-141.

Voluntary vs. Directed Siting - Or Somewhere In-Between? Elizabeth Peelle, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p201-212

What's Science Got To Do With It?: The Use of Public Opinion in Developing Nuclear Waste Policy, Eric B. Herzik and John L. Dobra, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p112-120.

Why Do Engineers Wear Black Hats? P. Aarne Vesilind, El Jan. 93, p1-7.

The World is Coming to an End: E. B. Rice Memorial, William L. Ryan, CR Sept. 94, p87-92.

Public participation

Advertising Public Outreach: Going Where the People Are, Douglas Bradford and Daniel Burns, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p76-82.

Applying a Problem-Solving and Consensus Building Approach to Transportation Infrastructure and Environmental Protection, Eugene W. Cleckley, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p226-228.

Breakout Session 4C: Public Participation, Brian Ketchum, Marilyn Skolnick and Kathleen Stein Hudson, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p154.

CERF's Corporate Board Adds New Categories, CE Jan. 94, p77.

Cooperative Ground-Water Resources Management: Local Perspective, Amleto A. Pucci, Jr., WR Nov./Dec. 94,

Developing a Public Involvement Policy for the Civilian Radioactive Waste Management Program, Susan Smith, Mary E. Gleason, Jane Summerson and Patricia Catherwood Reyes, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p176-181.

Earning Empowerment From Stakeholders, Peter T. Johnson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p258-262.

Engineers and Leadership: How to Move up "Economic Food Chain", Richard G. Weingardt, El Jan. 94, p50-57. Engineers Should Learn to Use System to Gain Respect and Money (ltr), CE Sept. 94, p32-33.

EPA's Public Consultation and Communications Needs Assesment for Its WIPP Outreach Program, Amy M. Newman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p88-91.

Expected Reaction to Various Options for Spent-Fuel Storage, John Richardson, Christopher Charles and Ausra M. Richards, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p98-103.

Facilitating Sustainable Development: Role of Engineer, Geoffrey H. Coates, El July 93, p225-229.

Growing Interest, Growing Programs, Growing Pains: Suc-cessfully Customizing Public Outreach, Mindy Wadkins, Carleen Hill and Theresa Hirsch, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p232-237.

High-Level Radioactive Waste Curriculum Usage, Evalua-tion, and Customer Focus, Ginger P. King, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p104-111.

In News from All Over, Civil Engineers Continue to Shine, NE Apr. 94, p14.

Involving the People: Re-Connecting American Citizens to their Local Government, John R. Henderson, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p377-386.

Involving the Public to Reach Consensus in Water Resources Projects - An Interdisciplinary Perspective, Lee Judd, Ken Steele, Sara Katz and Scott McCreary, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p513-516.

Menomonee Valley Greenway Feasibility Study, Therese Gripentrog, Wink Hastings and Eduard J. Freer, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p1-6.

A New Approach to Water Education: Children's Water Festivals, Darell D. Zimbelman and Brian R. Werner, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

A Process for Integrating Public Involvement Into Techni-cal/Social Programs, Susan Wiltshire and Carol Williams, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p275-279.

Public Involvement and Participation: Planning Imperatives for the Coming Century, Evan Vlachos, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p859-863.

Public Involvement in Water Resources Management, James W. Vearil, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p445-448.

Public Participation in Enviornmental Issues in Taiwan, K. K. Li, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p193-200.

Redefining Public Involvement, Dennis J. Unsworth, ME July/Aug. 94, p13-15.

The Role of Partnering and Public Involvement in the Lackawanna River Corridor Greenway Study, Robyn S. Colosimo, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p453-456.

Secretary of Energy Review of the Civilian Radioactive Waste Management Program, Christopher A. Kouts, Allen B. Benson and Patricia Van Nelson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p9-12.

Storm Water Pollution Control for Industry: Developing Effective Guidelines Through Public Involvement, L. Donald Duke, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p517-520.

Technology Information Transfer in Public Outreach: A New Approach, John H. Peck and Mindy L. Wadkins, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p92-97.

TRB Meeting Focuses on Istea Implementation, CE Mar. 94, p20,22

Tunnel School, Brian Brenner and Richard O'Brien, El Oct. 94, p405-412.

Visitor Usage Analysis as Basis for Marina Expansion, William E. McCleish and John C. Corrough, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p597-604.

Water Resources Development in the 1990's: A New Process, Peter D. Binney, Lawrence H. Roth and Daniel D. Heagerty, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p822-825.

Why Do Engineers Wear Black Hats? P. Aarne Vesilind, El Jan. 93, p1-7.

Public policy

The Art of Infrastructure, Teresa Austin, CE Sept. 94, p40-43.

Conflict Between Professionalism and Political Responsiveness, Robert W. Brannan, El Jan. 94, p36-40.

Developing a Public Involvement Policy for the Civilian Radioactive Waste Management Program, Susan Smith, Mary E. Gleason, Jane Summerson and Patricia Catherwood Reyes, (High Level Radioactive Waste Manage-ment, High Level Radioactive Waste Program Committee, 1994), p176-181.

Improvements to the Clean Water Act and Related Statutes, Howard Holme, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p233-257.

Infrastructure and Economic Development: Civil Engineering Perspective, Neil S. Grigg, El Jan. 93, p51-61.

Nuclear Word Images as Policy Instruments, Janet S. Conary and Dennis L. Soden, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p121-130.

Perspectives on Water Quality Regulation, J. David Holm, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p145-154.

Public Involvement and Participation: Planning Imperatives for the Coming Century, Evan Vlachos, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p859-863

Subcontractor's Indemnity is Limited, CE July 94, p24.

Urban Versus Rural Risk Perception Relating to High-Level Nuclear Waste, Dennis L. Soden, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p136-141. Water Resources Planning and Management: Now & Twenty Years from Now, Kyle E. Schilling, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p219-225.

Public safety

Building Code Enforcement Issues, Hindsight and Foresight, John C. Pistorino, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p125-132.

Critique: Rebuilding and Recovery, Ben L. Sill, (Hurri-canes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed.,

1994), p300-302.

Emergency Response Preparedness Analysis for Radioacmergency response Prepareaness Analysis for Radioactive Materials Transportation, Emelinda M. Parentela, Shashi K. Sathisan, Sandeep S. Burli and Walter C. Vodrazka, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1249-1254.

Exploratory Studies Facility and Potential Repository Source Term, J. D. Smith, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p549-553. Hurricane Shelter Design Criteria for Public Schools, Ajay Shanker, R. Wayne Drummond, Raja R. Issa and Kalika Wamanacharya, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p233-240.

Integration of Regulations and Science for HLW Disposal, Lawrence D. Ramspott, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p292-295.

Policy Issues of Transporting Spent Nuclear Fuel by Rail, H. Barry Spraggins, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p163-167.

Shelters for Hurricane Refuge, Herbert S. Saffir, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed.,

1994), p241-248. Uniform State Registration and Permitting For High-Level Radioactive Waste Transportation, James B. Reed, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p158-162.

Public service

Chile's President Is Named Honorary Fellow of ASCE, NE June 94, p5.

Public transportation

Breakout Session 2A: TCM Requirements - General, Daniel Beagan, Elizabeth Deakin, Christine Kirby and Joseph Pulaski, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p140-141.

Breakout Session 6A: Mass Transportation, Matthew Coo-gan, Lansingh Freeman and Victoria Rankin Marks, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p161.

Transit Agencies May Face Shortfall, CE May 94, p8.

Public welfare

Chile's President Is Named Honorary Fellow of ASCE, NE June 94, p5.

Engineers Must Play Power Game of Politics, CE Nov. 94,

Include Recreational Benefits in Beach Protection, CE July 94, p6.

Public works

Budgeting for Facility Repair and Maintenance, A. L. Barco, ME July/Aug. 94, p28-34.

Debris Removal Operations Following Hurricane Andrew, Rex M. Holmlin, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p539-547.

Federal Public Works Infrastructure R&D: A New Perspective, Report No. 93-EF1003, Civil Engineering Research Foundation, 1993, 0-87262-943-0, 76pp.

Infrastructure and Economic Development: Civil Engineer-ing Perspective, Neil S. Grigg, El Jan. 93, p51-61. Infrastructure Management: U.S. and Japanese Systems Contrasted, Neil S. Grigg, UP Mar. 94, p1-13.

Involving the People: Re-Connecting American Citizens to their Local Government, John R. Henderson, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p377-386.

Let's Keep this Private, CE Sept. 94, p8.

Market Models, Protest Bids, and Outliers in Contingent Valuation, Greg Lindsey, WR Jan./Feb. 94, p121-129.

Process Model for Public Sector Design-Build Planning, Anthony D. Songer, C. William Ibbs and Thomas R. Na-pier, CO Dec. 94, p857-874.

Redefining Public Involvement, Dennis J. Unsworth, ME July/Aug. 94, p13-15.

Reforming Japan's Public Works, Derek Dylan Bell, WP Special issue 94, p6-9.

Survey on Local Public Works Yields Some Surprises, CE

July 94, p21-22. Taking Trash Out of Hiding, Keith R. Connor, R. Chris Brockway and Bruce E. Henning, CE Feb. 94, p40-43. Water on Stone, Keri Wyatt Kent, WP Spring 94, p37-40.

Publications

Dredging Desk Reference: Accomplishments and Future Developments, Thomas M. Verna and Lyle J. Maciejewski, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p170-179.

Ending Gridlock on Ending Gridlock?, CE Nov. 94, p24.

For Engineers, 2 Basic Primer on Sustainable Development, NE Apr. 94, p10.

Guidance for Wetland Restoration with Dredged Material, Michael R. Palermo and Elba A. Dardeau, Jr., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p956-960. Guide to Painting Steel Structures to be Published, CE Nov. 94, p21-22.

More on Mexico, Vietnam, WP Spring 94, p4.

Technical Guidelines for Dredged Material, Norman R. Francingues, Jr. and Michael R. Palermo, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p616-625.

Puerto Rico

Design, Construction and Performance of a Soil Nailed Wall in Puerto Rico, Suang S. Cheng and Lawrence A. Hansen, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p1-16. Puerto Rico Privatizes the Roads, Jack S. Schnettler, CE

Feb. 94, p56-58.

Pull-out resistance

Bond Strength of Welded Wire Fabric in Concrete Bridge Decks, Bilal M. Ayyub, Naji Al-Mutairi and Peter Chang, ST Aug. 94, p2520-2531.

Determination of Interfacial Debond Mode for Fiber-Reinforced Cementitious Composites, Victor C. Li and

Yin-Wen Chan, EM Apr. 94, p707-719.

Experimental Behavior of Polymeric Geogrids in Pullout, Ragui F. Wilson-Fahmy, Robert M. Koerner and Leonard J. Sansone, GT Apr. 94, p661-677.

Pullout of Inclined Fibers from Cementitious Matrix, C. Ouyang, A. Pacios and S. P. Shah, EM Dec. 94, p2641-

2659

Testing and Predicting the Movement of a Drilled Shaft in New Mexico, Koon Meng Chua, Wimpie A.N. Aspar and Robert Meyers, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p279-290.

Compression Strength of Pultruded Flat Sheet Material, J. T. Mottram, MT May 94, p185-200.

Compression Strength of Pultruded FRP Materials, Ever J. Barbero and John Tomblin, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p836-843.

Connections for Pultruded Composites: A Review and Evaluation, Ayman S. Mosallam, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1001-1017.

Flexural Response of FRP Reinforced Concrete Structures, El-Attar A. El-bar, Ibrahim M. Ibrahim and Ayman S. Mosallam, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p583-591.

Static Behavior of Pultruded GFRP Sections, Hota V. S. GangaRao and V. Nagaraj, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p844-848.

Tests on Deep I-Shape Pultruded Beams, A. Zureick and L. F. Kahn, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1572-1577.

The World's Longest Cable-stayed Foot-Bridge Using Fiber Reinforced Plastics, Magdi A. Khaiifa and Maher K. Tadros, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p207-214.

Petrographic and Geochemical Characteristics of a Section Through the Tiva Canyon Tuff at Antler Ridge, Yucca Mountain, Nevada, Frances R. Singer, Frank M. Byers, Jr., Beth L. Widmann and Robert P. Dickerson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1869-

Pump intakes

Model-Prototype Conformance of a Submerged Vortex in the Intake of a Vertical Turbine Pump, K. Warren Frizell, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p482-489.

Underwater Cleanup of a Pool of Liquid Creosote, B. G. Bennett and I. K. Hill, (*Dredging '94*, E. Clark McNair,

Jr., ed., 1994), p961-970.

Biodegradation of Phenanthrene in Sand Columns in the Presence of Nonionic Surfactants, David Norris and Tariq Ahmed, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p360-367.

Computer simulation of pulsed pumping for remediation under mass transfer limited conditions, Z. Jiang and W. P. Ball, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p352-359.

Dissolution of TCE and TCA Pools in Saturated Subsurface Systems, Albert E. Pearce, Evangelos A. Voudrias and Michael P. Whelan, EE Sept./Oct. 94, p1191-1206.

Fate/Transport Modeling and Remediation of Contaminated Plume at Vance Airforce Base, Avdhesh K. Tyagi and Sharon H. Carpenter, (Hydraulic Engineering George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p287-292.

Genetic Algorithms in Groundwater Management, L. Srinivasa Reddy, (Hydraulic Engineering '94, George Srinivasa Reddy, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

p293-297.

Modeling Municipal Water Demands for a Pump Station Area, Bindu Reddy, Jerry Rogers, Theodore Cleveland, Lu-Chia Chuang and Kathlie Sheu, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p65-68.

Optimal Control of Water-Supply Pumping Systems, Lin-dell E. Ormsbee and Kevin E. Lansey, WR Mar./Apr. 94,

Optimal Operation of Ground-Water Supply Distribution Systems, S. Pezeshk, O. J. Helweg and K. E. Oliver, WR Sept./Oct. 94, p573-586.

Optimal Operation of Multiple-Reservoir System, Philip D. Crawley and Graeme C. Dandy, WR Jan./Feb. 93, p1-17.

Ranking Ground-water Management Alternatives by Multicriterion Analysis, Lucien Duckstein, Wiktor Treichel and Samir El Magnouni, WR July/Aug. 94, p546-565.

The San Gorgonio Pass Water Project, Richard B. Bell, Aladdin Shaikh and Stephen P. Stockton, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p73-76.

Scada System Requirements for Optimum Pumping, Vilas Nitivattanannon, Elaine C. Sadowski and Rafael G. Quimpo, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p110-

Transient Radius of Influence Model, Shu Tung Chu, IR Sept./Oct. 94, p964-969.

Pumping plants

Eliminating Water Column Separation and Limiting Backspin at a 12,000-Horsepower Pumping Plant, Paul Otter, David Hoisington and David Raffel, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p435-444.

Model-Prototype Conformance of a Submerged Vortex in the Intake of a Vertical Turbine Pump, K. Warren Frizell, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh,

ed., 1994), p482-489.

Seismic Analysis of Failure and Loss of Function of Water Pumping Facilities, M. A. Cassaro, S. E. Hamburg, D. An and M. J. Cassaro, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1208-1213.

Pumping stations

Constant-Speed Pubping Stations Can Clean Up for the First Time, ET Apr./May 94, p7.

SCADA System Controls Combined Sewer Overflow Reg-ulation System to Optimize Wastewater Collection, Russell W. Batzel, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p822-828.

Seismic Fragility Analysis of Sheahan Pumping Building, Howard H. M. Hwang, Ah Lim Ch'ng and Hui-Mi Hsu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1006-1011.

Use of Hydraulic Control Valves in Deep-Well Pump Station Design Under Low/No Discharge Pressure, Jorge A. Garcia and Les Coffman, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p62-72

Utilizing Mathcad for Hydraulic Design of Stormwater Pump Stations, T. Chris Evensen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p814-821.

The Dredging Research Program Technical Area 3, William D. Martin, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p11-17

Optimal Pump Operations Considering Pump Switches, Kevin E. Lansey and Kofi Awumah, WR Jan./Feb. 94,

Selecting Controls for Water Distribution Systems, J. Paul Tullis, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p43-61.

Review of Cold-Formed Steel Purlin Design, Roger A. La-Boube, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1578-1580.

Strength-Ratio Based Assessment of Wood Structures, Jozsef Bodig and Loren D. Flick, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p677-684.

Construction of the Clark Cable-Stayed Bridge at Alton, Illinois, David Goodyear and Ralph Salamie, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p672-676.

The New Clark Bridge: Saddle-Draped Cables, David Goodyear and Ralph Salamie, CE Aug. 94, p46-49.

The Normandie Bridge, Michel Virlogeux, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p660-665.

Quadratic programming

A Generalized Approach to the Local Stability of Stiffened Generalized Approach to the Local Stanfily of Statistics Part II-Approximate Solution, Archibald Sherbourne and Osama Bedair, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1532-1537.

Qualifications

Qualification System for Building Engineers in Japan, Katsumi Yano, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p211-214.

Qualification System for Building Engineers in Korea, Li-Hyung Lee and Waon-Ho Yi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p215-220.

Quality assurance

Application of Dredge Monitoring Systems to Dredge Contract Administration Quality Assurance, Stephen H. Scott and Jeffrey D. Jorgeson, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p776-785.

Computer Use QA Documentation for Compliance with ISO-9000, Vyomesh Vora, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1812-1815.

Developing Quality-Improvement Processes in Consulting Engineering Firms, Daniel F. Predpall, ME May/June 94, p28-34

Estimating Clay Liner and Cover Permeability Using Com-putational Neural Networks, Girish Agrawal, Saroj Weeraratne and Kris Khilnani, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p115-122.

Existing Sewer Evaluation and Rehabilitation, Second Edition, Second edition (M&R No. 62), Joint Task Force of the Water Environment Federation and the American Society of Civil Engineers, (B. Jay Schrock, chmn.), 1994,

0-7844-0049-0, 270pp.

Genetic Algorithms and Neural Networks: Do Pluralized Techniques Hold Any Advantages for Designing Groundwater Quality Assurance Systems? J. Wayland Eheart, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p258-261.

Industrial Facility Quality Perspectives in Owner Organizations, Kelly Jean Fergusson and Paul Teicholz, CF May

94, p89-109.

Integrated Automation Systems in Structural Engineering Song Fong Jan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1318-1325.

A New Automated System for Decision Support in the Construction Industry, M. J. Riley and C. J. Pickering, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p523-530.

Quality Assurance and Quality Control for Pavement Management in Florida, Bruce T. Dietrich and W. Virgil Ping, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1034-1041.

Quality Assurance and Quality Control in Laboratory Bioassays of Dredged Material, David W. Moore, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p728-

Quality Assurance for Hazardous-Waste Projects, N. S. Shashidhara, CE Dec. 94, p66-68.

Quality in Constructed Project: Surveying Engineering, Gunther Greulich, Wayne H. Valentine and R. R. Chamard, SU May 94, p52-61.

Quality of Map Data in Geographic Information Systems, Gary A. Jeffress, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p221-224.

Ouality Performance on Successful Project, W. B. Ledbetter, CO Mar. 94, p34-46.

Statistical Quality Control and Assurance in Bituminous Materials, Y. J. Chou and W. V. Ping, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1051-1058.

Status-NRC's QA Overview of the High-Level Nuclear Waste Geologic Repository, William L. Belke and Ken-neth R. Hooks, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1716-1721.

Understanding ISO, Virginia Fairweather, CE Feb. 94, p59-61.

The Value of Illusion vs. the Illusion of Value - The Full Range of Recreational Amenities that are Needed for the Marina of Today and Tomorrow, Daniel S. Natchez, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p232-237.

Quality control

Alabama DOT Implementation of Hot Mix Asphalt QC/QA Procedures, Frazier Parker, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994). p1026-1033.

ASCE Quality Summit Raises Troubling Questions on Safety and Other Issues Confronting Engineers, NE Jan. CAD-Based "Intelligent" Drawings: An Automated Quality Control Approach to Land Development, Charles McIn-tyre, Kevin Parfitt and Matt Syal, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p547-554.

The Computer is Not the Problem (ltr), CE May 94, p32-

Construction Facilities Audit: Quality System-Performance Control, Allan F. Samuels, ME July/Aug. 94, p60-65.

Demands and Satisfiers for Automation and Robotics in Construction: Differences Between Japan and the United States, Hiroshi Saito and John G. Everett, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p419-426.

Dispute Avoidance and Resolution for Consulting Engineers, Richard K. Allen, 1993, 0-87262-903-1, 85pp.

Durable Concrete, Bryant Mather, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p52-63.

Ethics and Quality in the Constructed Project, Jerome S. B. Iffland, El Jan. 94, p8-24.

Hydraulic Conductivity Assessment of Slurry Wall Using Piezocone Test, M. Manassero, GT Oct. 94, p1725-1746. Industrial Facility Quality Perspectives in Owner Organizations, Kelly Jean Fergusson and Paul Teicholz, CF May 94, p89-109.

Is it Necessary to Compromise Engineering Ethics to Remain Competitive? Jim V. Anderson, El Oct. 94, p379-

The Northridge Question: Can We Do Better?, CE May 94,

507

Object Maps for Developing Automated Working Drawing Quality Control Procedures, M. Kevin Parfitt, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1787-1790.

PCI Plant and Personnel Certification for the Precast Concrete Industry, John S. Dick, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed.,

1994), p912-918.

Quality Assurance and Quality Control for Pavement Man-agement in Florida, Bruce T. Dietrich and W. Virgil Ping, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1034-1041.

Quality Assurance and Quality Control in Laboratory Bioassays of Dredged Material, David W. Moore, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p728-736

Quality Control with Reliability for Large GPS Networks, Alfred Leick and Michael B. Emmons, SU Feb. 94, p25-41.

Quality Management of Earthwork Using Knowledgebased Systems, Shrinath J. Kotdawala and Imad A Basheer, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p426-429.

The Re-derivation of the NDBC Wind-Wave Algorithm, Ian M. Palao and David B. Gilhousen, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and

J. Michael Hemsley, ed., 1994), p569-575.

Redesigning Job Site Planning Systems, Glenn Ballard, Gregory Howell and Saied Kartam, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1564-

Roadmap to Current Benchmarking Literature, Andrew E. Jackson, Robert R. Safford and William W. Swart, ME Nov./Dec. 94, p60-67.

Silent Inspector - An Aid to Dredge Inspection, James Rosati, III and Timothy L. Welp, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p756-763.

Statistical Quality Control and Assurance in Bituminous Materials, Y. J. Chou and W. V. Ping, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1051-1058.

Statistical Sample Size for Construction of Soil Liners, Craig H. Benson, Huaming Zhai and Salwa M. Rashad, GT Oct. 94, p1704-1724.

Structural Failure and Quality Assurance of Space Frames, Tien T. Lan, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p123-132.

U.S. Experience with Dynamic Compaction of Collapsible Soils, Kyle M. Rollins and Ji-Hyoung Kim, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p26-43.

Understanding ISO, Virginia Fairweather, CE Feb. 94,

We'd do it Again, Say Partnering Vets, ME July/Aug. 94, p11.

Quality control - management ADR, TQM, Partnering, and Other Management Fantasies, F. H. "Bud" Griffis, El Oct. 92, p331-344.

Barriers to Constructability Implementation, James T.
O'Connor and Steven J. Miller, CF May 94, p110-128. Constructability Programs: Method for Assessment and Benchmarking, James T. O'Connor and Steven J. Miller, CF Feb. 94, p46-64.

Constructability Related to TQM, Value Engineering, and Cost/Benefits, Jeffrey S. Russell, Kevin E. Swiggum, Jeffrey M. Shapiro and Achmad F. Alaydrus, CF Feb. 94, p31-45.

Construction Facilities Audit: Quality System-Performance Control, Allan F. Samuels, ME July/Aug. 94, p60-65.

Developing Quality-Improvement Processes in Consulting Engineering Firms, Daniel F. Predpall, ME May/June 94,

Dispute Avoidance and Resolution for Consulting Engineers, Richard K. Allen, 1993, 0-87262-903-1, 85pp. Partnering Pardign, Herbert F. Harback, Donald L. Basham

and Robert E. Buhts, ME Jan./Feb. 94, p23-27. Quality Performance on Successful Project, W. B. Ledbet-

ter, CO Mar. 94, p34-46. Quality-Measurement Matrix, James D. Stevens, Charles Glagola and William B. Ledbetter, ME Nov./Dec. 94. p30-35

Value of Concurrent Engineering for A/E/C Industry, Jesus M. de la Garza, Primo Alcantara, Jr., Munish Kapoor and P. S. Ramesh, ME May/June 94, p46-55.

Quantitative analysis

Bayes' Theorem and Quantitative Risk Assessment, Stan Kaplan, (Risk-Based Decision Making in Water Re-sources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p186-193.

Quarries

Alameda Creek Water Resources Study, Terry L. Erlewine and Edward H. Stewart, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p17-20.

Ouestionnaires

Airports and Air Quality Issues - the European Perspective, David W. Raper, Roger L. Wayson, William Bowlby and James W. S. Longhurst, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p193-210.

Latest ASCE Salary Index is Released, CE Aug. 94, p64.

Metamodeling Approach for Approximating the Operating Characteristics of Series of G/G/I Queues on Congested Waterways, Melody, D. M. Dai and Paul Schonfeld, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p490-497.
Simulation Verifies Queuing Program for Selecting Loader-Truck Fleets, Foad Farid and Thomas L. Koning,

CO June 94, p386-404.

Racial factors

Seminar Subjects Don't Target Profession's Problems (ltr), CE May 94, p38.

Ground-Penetrating Radar For Salt-Affected Soil Assessment, Sun F. Shih and Don L. Myhre, IR Mar./Apr. 94, p322-333.

Observations of Wind Wave Growth by ERS-1 SAR, Chich Y. Peng and Antony K. Liu, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p934-942.

Simulation of Flow in Circular Clarifiers with and without Swirl, László Szalai, Peter Krebs and Wolfgang Rodi, HY Jan. 94, p4-21.

Transient Radius of Influence Model, Shu Tung Chu, IR Sept./Oct. 94, p964-969.

Ultimate Settlement by Hyperbolic Plot for Clays with Vertical Drains, Siew-Ann Tan, GT May 93, p950-956.

Avoiding Dual Regulation of the Civilian Radioactive Waste Management Program, John G. Vlahakis and Ricardo J. Palabrica, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1593-1596.

Design and Construction of Shielded Lunar Outpost, S. D. Jolly, J. Happel and S. Sture, AS Oct. 94, p417-434.

Environmental Hardening of a Mobile-Manipulator System for Nuclear Environments, Sammy L. Jones, Timothy Cable, James S. Tulenko, Stoyan Toshkov and Fred R. Sias, Jr., (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p296-

Heat Transfer Effects in Vertically Emplaced High Level Nuclear Waste Container, Samir F. Moujaes and Yao M. Lei, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p816-822.

Methodology for Comparing Lunar Settlement Designs, Keith Trivelpiece, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p969-978.

Monitored Retrievable Storage/Multi-Purpose Canister Analysis: Simulation and Economics of Automation, Phil C. Bennett and Joe B. Stringer, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p363-369.

Multi-Purpose Canister At-Reactor and Monitored Retrieval Storage, Tonya H. Sawyer and Robert G. Eble, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

n1380-1386

A Near-Term, Long-Duration, Lunar Outpost Design, S. Sture, S. D. Jolly and J. Happel, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p237-246.

Nuclear Propulsion: Safety Measures and Concerns, Lindsay N. Herron, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p747-750.

Partitioning of Evapotranspiration Using Lysimeter and Micro Bowen-Ratio Systems, Hossein Ashktorab, W. O. Pruitt and K. T. Paw U, IR Mar./Apr. 94, p450-464.

Radiation Effects from Uranium Ore Bodies, James O. Duguid, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1337-1343.

Removal of Bromate After Ozonation by Electron Beam Irradiation, M. Siddiqui, G. Amy, W. Cooper, C. Kuruz and T. Waite, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p654-661.

Shielding Analysis for the Conceptual Design of the MPC Transportation Cask, Kelvin J. Montague, James R. Transportation Cask, Netvill J. Montague, Janko N. Thornton, Jr. and Robert G. Eble, Jr., (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p918-922.

Thermal Qualification Testing of Efficient Neutron Shield Materials, Richard H. Boonstra, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p765-771.

Thermal Response in Antenna Under Laser Irradiation, Leslie A. Blackham and Arsalan Razani, (Engineering, Construction, and Operations in Space IV, Rodney C Galloway, ed. and Stanley Lokaj, ed., 1994), p196-205.

Radioactive materials

Actinide Recycling For Reactor Waste Mass and Radiotoxicity Reduction, A. Renard, T. Maldague, S. Pilate, J. Journet, M. Rome, A. Harislur and J. Vergnes, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1682-1690. 1689.

- Analysis of Flow Along Anisotropic Fractures in Partially Saturated Media, J. S. Y. Wang and B. L. Cox. (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1915-
- Analysis of Potential Highway Routes to Yucca Mountain, Shashi K. Sathisan, Emelinda M. Parentela and Michael S. Lee, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1278-1285.
- Atmospheric Transport Prediction Using an Adaptive Finite Element Method, Darrell W. Pepper and Ashley F. Emery, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1946-1952
- Burnup Verification Using the Fork Measurement System, Ronald I. Ewing, (High Level Radioactive Waste Man-agement, High Level Radioactive Waste Program Committee, 1994), p732-738.
- Denitrification Inhibition by High Nitrate Wastes, W. Vey-dovec, J. Silverstein, N. E. Cook, Jr., L. A. Figueroa, R. Hund and G. D. Lehmkuhl, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p415-422.
- Determining Plutonium Concentration in Solution Using a Germanium Crystal and a New L X-Ray/r-Ray Spectrographic Method, Raymond C. Gatti, Heino Nitsche, Scott A. Carpenter, Kevin E. Roberts, Becraft Kevin A. and Traudel G. Prussin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2719-2729.
- The Development of a Packaging Handbook, L. B. Shap-pert, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1237-1241.
- Development of Functional Characteristics of Vehicle Mounted Plastic Scintillation System, John G. Follette, Jeffrey J. Tappen and Christopher T. Briggs, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1964-1970.

Dispersivity in Heterogeneous Permeable Media, Dwayne A. Chesnut, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1822-1841.

- The Effect of Fuel Type in Unsaturated Spent Fuel Tests, P. A. Finn, M. Gong, J. K. Bates, J. W. Emery and J. C. Hoh, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1080-1087.
- Emergency Response Preparedness Analysis for Radioactive Materials Transportation, Emelinda M. Parentela, Shashi K. Sathisan, Sandeep S. Burli and Walter C. Vodrazka, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1249-1254.
- Engineered Barrier Environment, Yucca Mountain, Dale G. Wilder, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1179-1187.
- Exploratory Studies Facility and Potential Repository tploratory Studies Pacinity and Potential Repositors, Source Term, J. D. Smith, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-gram Committee, 1994), p549-553.
- Geoscientific Studies in the Tono Area, Japan, T. Nohara, T. Tsuboya, M. Yamakawa, H. Sakuma and Y. Yusa, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2243-2250.
- Ground-Water Recharge in Fortymile Wash Near Yucca Mountain, Nevada, 1992-93, Charles S. Savard, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1805-
- A Hybrid Algorithm for Radionuclide Estimation, E. A. Yfantis, G. T. Flatman and F. S. Makri, (High Level Ra-dioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2063-2068.

- The Impact of Buoyant, Gas-Phase Flow and Heterogeneity on Thermo-Hydrological Behavior at Yucca Mour tain, Thomas A. Buscheck and John J. Nitao, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2450-
- Improved Thermal Source Term Generation Capability for Use in Performance Assessment and System Studies, John King and Carol Rhodes, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p627-633.

In Situ Photothermal Deflection Spectroscopy of Uranium Dioxide Dissolution, James D. Rudnicki, Richard E. Russo and David W. Shoesmith, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2609-2615.

An International Approach to Radioactive Waste Management, John W. Bartlett, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p26-29.

IPA Phase 2 and NRC's HLWM Regulatory Program, Norman A. Eisenberg, Rex G. Wescott, Margaret V. Federline, Mel Silberberg and Budhi Sagar, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1451-1460.

- Models for Source Term, Flow, Transport and Dose As-sessment in NRC's Iterative Performance Assessment, Phase 2, Timothy McCartin, Richard Codell, Robert Neel, William Ford, Rex Wescott, John Bradbury, Budhi Sagar and John Walton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1469-1479.
- A molecular Solution to Radioactive Waste, ET Dec. 94/Jan. 95, p11.
- The Nevada Statewide Radioactive Materials Transportation Plan, Maria Ardila-Coulson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p150-157.
- Nuclear Arms Reduction, Nuclear Proliferation and High-Level Radioactive Waste Management, Daniel B. Bullen and James M. McCormick, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p30-39.
- Numerical Studies of Radionuclide Migration in Layered Porous Media, Robert L. Buckley, Sudarshan K. Loyal-ka and M. M. R. Williams, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1842-1847
- Population Estimation Techniques for Routing Analysis, Shashi K. Sathisan and Anil K. Chagari, (High Level Ra-dioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p658-665.
- Precipitation Kinetics of Radioactive Elements and Their Effect Upon Redox Conditions of the Nearfield, Hiroyasu Takase and Peter Grindrod, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p491-500.
- Preliminary Spent LWR Fuel Oxidation Source Term Model, R. E. Einziger, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p554-559.
- Radionuclide Release Rates From Natural Analogues of Spent Nuclear Fuel, D. B. Curtis, J. Fabryka-Martin, P. Dixon, R. Aguilar and J. Cramer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2228-2236.
- Radionuclides Migration in Fractured Porous Rock: Analytical Solutions for Various Boundary Conditions, Shih-Hai Li and Shean-Lang Chiou, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1344-1349.
- Raising Students' and Educators' Awareness of Radioac-tive Materials Transport Through Creative Classroom Materials and Exhibits, Judith Holm, Cheryl Sandoz, Jennifer Dickenson, Anne Marie Smith and Jan Cortelyou Lee, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p213-216.

Results of Drip Tests of Sludge-Based and Actinide-Doped Glasses, J. K. Bates and E. C. Buck, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p1088-1101.

Waste Frogram Committee, 1994, p1006-1101.
Sensitivity of Radiological Impacts of a Waste Disposal System to Radionuclide Sorption in the Geosphere, T. W. Melnyk, J. McMurry and F. P. Sargent, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1222-1228.

Spent Fuel Characteristics Relevant to High-Level Waste (HLW) Source Term, Hersh K. Manaktala, Prasad K. Nair and Charles G. Interrante, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p560-564.

Stakeholder Involvement in the Evaluation of a Multipurpose Canister System, Susan Smith, Pete Bolton and Tim Dantoin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p314-1-314-6.

- he Testing of Thermal-Mechanical-Hydrological-Chemical Processes Using a Large Block, W. Lin, D. G. Wilder, J. A. Blink, S. C. Blair, T. A. Buscheck, D. A. Chesnut, W. E. Glassley, K. Lee and J. J. Roberts, (High Level Radioactive Waste Management, High Level Radioactive Waste Management Manage dioactive Waste Program Committee, 1994), p1938-
- The Tracking of High Level Waste Shipments-Transcom System, P. E. Johnson, D. S. Joy, R. B. Pope, T. M. Thomas and P. B. Lester, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1242-1248.

Training for Effective Public Outreach: A Model for Trans-portation Risk Communication Training, Judith Holm, Kathie Reed and Dick Tardif, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p83-87.

U-234/U-238 Ratio: Qualitative Estimate of Groundwater Flow in Rocky Flats Monitoring Wells, J. C. Laul, (High Level Radioactive Waste Management, High Level Ra-dioactive Waste Program Committee, 1994), p2702-2708

Wetting Phase Permeability in a Partially Saturated Horizontal Fracture, M. J. Nicholl and R. J. Glass, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2007-2019.

Yucca Mountain: A Potential Trade-Off in Radiological Hazards, P. Spiegler, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1959-1963.

Radioactive tracers

Isotopic Tracers of Gold Deposition in Paleozoic Lime-stones, Southern Nevada, Z. E. Peterman, B. L. Wid-mann, B. D. Marshall, J. N. Aleinikoff, K. Futa and S. A. Mahan, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1316-1323.

Migration of Conservative and Poorly Sorbing Tracers in Granite Fractures, Tjalle T. Vandergraaf, Chung-Kyun Park and Douglas J. Drew, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p2251-2256.

Radioactive waste disposal

1993 Recreational Vehicle (RV) Park Census in Beatty and Pahrump, Nevada, Lloyd E. Levy and Marcia D. Housel, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p48-55.

A-Tough: A Multimedia Fluid-Flow/Energy-Transport Model for Fully-Coupled Atmospheric-Subsurface Interactions, Parviz Montazer. Dale Hammermeister and Joseph Ginanni, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2333-2340.

Above and Below Boiling Thermal Loading Strategies for Large Waste Packages, Marvin L. Smith, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2146-2151.

Advertising Public Outreach: Going Where the People Are, Douglas Bradford and Daniel Burns, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p76-82.

Alternative Approaches to Reliability Modeling of a Multi-ple Engineered Barrier System, Malwane M. A. Ananda and Ashok K. Singh, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1030-1036.

Analyzing Mass Perceptions of Nuclear Politics: Puzzling Over Trust, Hank C. Jenkins-Smith, Deborah A. Pratt and Gilbert W. Bassett, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p131-135.

Application of Heavy Duty Roadheaders for Underground Development of the Yucca Mountain Exploratory Study Facility, Jamal Rostami, Levent Ozdemir and David M Neil, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p395-402.

Application of Lessons Learned Experience To Human Factor Engineering of the Planned Monitored Retrievable Storage Facility, Dan Kane, Hok Wai Kwan and John Richardson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p351-357.

Applications of Multi-mode Imaging to Multiple Offset VSP Data, A. H. Balch, Cemal Erdemir and Joseph P. Rousseau, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p2797-2803.

Appropriateness of One-Dimensional Calculations for Repository Analysis, Roger R. Eaton, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p1492-1500.

Approximating the Imbibition and Absorption Behavior of a Distribution of Matrix Blocks by an Equivalent Spherical Block, Robert W. Zimmerman and Gudmundur S. Bodvarsson, (High Level Radioactive Waste Manage-ment, High Level Radioactive Waste Program Committee, 1994), p2030-2037.

The Assessment of Future Human Actions at Radioactive Waste Disposal Sites: An International Perspective, D. R. Anderson, D. A. Galson and E. S. Patera, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1286-1291.

At-Reactor Dry Storage Issues, Flora Emami, William Hollaway and Mark Fleming, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p1152-1160.

An Auxiliary Ventilation Design Approach for the ESF Development at Yucca Mountain, P. Mousset-Jones and F. Calizaya, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p508-514.

Avoiding Dual Regulation of the Civilian Radioactive Waste Management Program, John G. Vlahakis and Ricardo J. Palabrica, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Com-

mittee, 1994), p1593-1596.

Borehole Fluid Dynamic Temperature Logging to Evaluate Fracture Hydraulic Properties, C.-F. Tsang, F. V. Hale, P. Bluemling and S. Vomvoris, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2655-2659.

A Borehole Instrumentation Program for Characterization of Unsaturated-Zone Percolation, Jack Kume and Joseph P. Rousseau, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Commit-

tee, 1994), p2076-2083.

Can Long Term Criteria for Deep Disposal be Implement-ed, K. Bragg, (High Level Radioactive Waste Manage-ment, High Level Radioactive Waste Program Committee, 1994), p1397-1403.

Canisters and Nonfuel Components at Commercial Nuclear Reactors, Kathy Gibbard and James Disbrow, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1543-1552.

Characterization of a Desert Soil Sequence at Yucca Mountian, NV, William R. Guertal, Alan L. Flint, Lon L. Hofmann and David B. Hudson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2755-2763.

Cleaning Up Toxic Wastes With Baking Soda, CE Sept.

94, p19.

A Comparative Study of U.S. and Russian High-Level Waste Repository Design Concepts, Z. T. Bieniawski and E. V. Kuzmin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p515-522.

omparison of Coupled Thermal-Mechanical-Hydrological Analysis of a Fractured Rock Mass, M. P. Comparison Ahola, A. H. Chowdhury, S. M. Hsiung and J. Philip, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p2492-2499.

Concept and Programme "Radioactive" Waste Disposal in Geological Formations of Ukraine, D. P. Khrushchov, M. P. Umanets and Eu. A. Yakovlev, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p2305-2309.

Constraining Local 3-D Models of the Saturated-Zone, Yucca Mountain, Nevada, G. E. Barr and Sharon A. Shannon, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p1814-1821.

Construction Monitoring Activities in the ESF Starter Tun-nel, John Pott and Scott Carlisle, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1993-1998.

Core Message from PNC/H-3 and Key Issues for the Next Milestone, Sumio Masuda, Katsuhiko Ishiguro, Mikazu Yui and Tadashi Mano, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1501-1507.

Coupled Mass-Transport and Chemical-Equilibrium Modelling of Bronze Disease, M. B. McNeil and J. C. Walton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p1014-1019

A Critically Educated Public Explores High Level Radio-active Waste Management, Jane E. Blum, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p224-231.

Decision Analysis of Hanford Underground Storage Tank Waste Retrieval Systems, M. W. Merkhofer, D. A. Bitz, D. L. Berry and L. J. Jardine, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1739-1744.

Developing a Public Involvement Policy for the Civilian Radioactive Waste Management Program, Susan Smith, Mary E. Gleason, Jane Summerson and Patricia Catherwood Reyes, (High Level Radioactive Waste Manage-

ment, High Level Radioactive Waste Program Committee, 1994), p176-181.

Developing Standardized Connection Analysis Techniques for Slim Hole Core Rod Designs, Gregory Fehr and Ed-mond I. Bailey, (High Level Radioactive Waste Manage ment, High Level Radioactive Waste Program Committee, 1994), p1048-1054

The Development of a Packaging Handbook, L. B. Shap-pert, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

Development of Functional Characteristics of Vehicle Mounted Plastic Scintillation System, John G. Follette, Jeffrey J. Tappen and Christopher T. Briggs, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1964-1970.

Development of Stochastic Indicator Models of Lithology, Yucca Mountain, Nevada, Christopher A. Rautman and Thomas H. Robey, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2510-2519.

Dispersivity in Heterogeneous Permeable Media, Dwayne A. Chesnut, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Commit-

tee, 1994), p1822-1841.

Doe's Topical Report on a Methodology to Assess Vibratory Ground Motion and Fault Displacement Hazards at the Yucca Mountain Site, David F. Fenster and Richard C. Quittmeyer, (High Level Radioactive Waste Manage-ment, High Level Radioactive Waste Program Committee, 1994), p2260-2265.

Earning Empowerment From Stakeholders, Peter T. John son, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994).

Effective Unsaturated Hydraulic Property Determination with the Renormalization Group Approach: Methodology, Sitakanta Mohanty and Amvrossios C. Bagtzoglou, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2660-2668.

The Efficiency of Source Terms in Performance Assess-ments for Salt Repositories, Dieter Buhmann, Jürgen Brenner and Richard Storck, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p501-507.

Environmental Justice: Implications for Siting of Federal Radioactive Waste Management Facilities, J. Bennett Easterling and James S. Poles, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p63-67.

EPA's Public Consultation and Communications Needs Assessment for Its WIPP Outreach Program, Amy M. Newman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p88-91.

Estimating Past Precipitation and Temperature from Fossil Ostracodes, Alison Jean Smith and Richard M. Forester, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2545-2552

Evaluation of Dynamic Compaction of Low Level Waste Burial Trenches Containing B-25 Boxes, Scott R. McMullin, (In-Situ Deep Soil Improvement, Kyle M.

Rollins, ed., 1994), p44-54.

Evaluation of Thermo-Hydrological Performance in Support of the Thermal Loading Systems Study, Thomas Buscheck, John J. Nitao and Steven F. Saterlie, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p592-610.

Exploratory Studies Facility and Potential Repository Source Term, J. D. Smith, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p549-553.

Fluid Inclusion Studies of Calcite Veins from Yucca Mountain, Nevada, Tuffs: Environment of Formation, Edwin Roedder, Joseph F. Whelan and David T. Vaniman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1854-1860.

A Formal Expert Judgment Procedure for Performance Assessments of the Waste Isolation Pilot Plant, Kathleen M. Trauth, Robert V. Guzowski and Stephen C. Hora, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1745-

Fracture-Matrix Interaction in Topopah Spring Tuff: Ex-periment and Numerical Analysis, Robert J. Glass, Vince C. Tidwell, Alan L. Flint, William Peplinski and Yvette Tidwell, Alan L. Flint, William Peplinski and Yvette Castro, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1905-1914.

The French Mediation Mission: Siting of Underground Research Laboratories, Christian Bataille, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p249-257.

FY93 Thermal Loading Systems Study, Steven F. Saterlie and Brent H. Thomson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p573-585.

A Gas Sampling System for Withdrawing Humid Gases From Deep Boreholes, Joseph P. Rousseau, William Thordarson and Mark A. Kurzmack, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2139-2145.

Geostatistics for Fracture Characterization, R. Mohan Srivastava and Bruce M. Davis, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p2131-2138.

Gravity and Megnetic Investigations of Yucca Wash, Southwest Nevada, V. E. Langenheim and D. A. Ponce, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2272-2278.

Ground-Water Recharge in Fortymile Wash Near Yucca Mountain, Nevada, 1992-93, Charles S. Savard, (High Level Radioactive Waste Management, High Level Ra-dioactive Waste Program Committee, 1994), p1805-

1813

Growing Interest, Growing Programs, Growing Pains: Successfully Customizing Public Outreach, Mindy Wadkins, Carleen Hill and Theresa Hirsch, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p232-237.

A Health Risk Based Approach for HLW Repository Envi-ronmental Protection Criteria, R. F. Williams, R. L. Yang, R. McGuire and R. E. Wilems, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1435-1450.

Heat Transfer Modeling in Burial Sites Containing Heat-Generating Waste, Mohamed Alsharif, Iqbal Ahmed and Paul Dickman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p899-906.

High Level Radioactive Waste Management, 4 vols., High Level Radioactive Waste Program Committee, (Thor L. Sanders, chmn.), 1994, 0-7844-0022-9, 3005pp.

- High Level Waste Disposal and Reprocessing in the UK, Nicholas L. Griffin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1690-1695.
- Hills, Charles R. Vojislav Banjac and A. Sharif Heger, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p671-678.
- How Can a Radioactive Waste Disposal Facility Achieve Compliance with RCRA? Ruth F. Weiner, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1525-1531.
- How Should the Migration and Retardation of Colloids be Characterized? Peter Grindrod, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2709-2718.
- A Human Factors Approach to Waste Form Design, Michael A. Rodriguez, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p684-690.
- Human Factors Engineering Applications in the Testing of the Legal Weight Truck Cask Transportation System, Thomas C. Smith, Millard Peck, III and Robert A. Sealock, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1001) 3-273 280. 1994), p375-380.

The IAEA's High Level Radioactive Waste Management Programme, D. E. Saire, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2279-2283.

The Impact of Buoyant, Gas-Phase Flow and Heterogeneity on Thermo-Hydrological Behavior at Yucca Mountain, Thomas A. Buscheck and John J. Nitao, (High Level Radioactive Waste Management, High Level Ra dioactive Waste Program Committee, 1994), p2450-2474.

Impacts of Repository Thermal Loading on System Cost, L. D. Rickertsen and W. W. Matyskiela, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p586-591.

Implication of Waste Package Heat Output Distributions Resulting From Waste Stream Variability, John F. King, Carol J. Rhodes and Steven F. Saterlie, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p868-876.

Implications of Theories of Asteroid and Comet Impact for Policy Options for Management of Spent Nuclear Fuel and High-Level Radioactive Wastes, Newell J. Trask, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1324-1328.

Improved Thermal Source Term Generation Capability for Use in Performance Assessment and System Studies, John King and Carol Rhodes, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p627-633. Incorporating Stakeholder Values in Systems Engineering Decision Making, Philip M. Altomare, Michael L. Grygiel and Bernard G. Morais, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p1762-1769.

Inferences of Paleoenvironment From Petrographic, Chemical and Stable-Isotope Studies of Calcretes and Fracture Calcites, David T. Vaniman and Joseph F. Whelan, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2730-2737.

Integrating Scientific Results for a Post-Closure Safety Demonstration, Edward C. Taylor, Lawrence D. Ram-spott, Scott Sinnock and William M. Sprecher, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p301-305.

Interfaces and interactions in the Swiss Waste Disposal Programme, C. McCombie, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p238-248.

Interfaces Between Transport and Geologic Disposal Sys-tems for High-Level Radioactive Wastes and Spent Nuclear Fuel—A New International Guidance Document, R. B. Pope, K. W. Han, T. Pollog, L. Baekelandt, D. Blackman, J.-M. Hoorelbeke and J. E. Villagran, (*High* Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1229-1236.

An International Approach to Radioactive Waste Manage-ment, John W. Bartlett, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p26-29.

IPA Phase 2 and NRC's HLWM Regulatory Program, Norman A. Eisenberg, Rex G. Wescott, Margaret V. Federman A. Eisenberg, Rex G. Wescot line, Mel Silberberg and Budhi Sagar, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1451-1460.

IPA Phase 2 Sensitivity and Uncertainty Analysis, Virginia Colten-Bradley, Richard Codell and M. Rose Byrne, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p1480-1491.

IPA Phase 2 Total System code and Scenario Analysis, James R. Park, Robert G. Baca, Norman A. Eisenberg, James R. Park, Robert G. Baca, Norman A. Elsenberg, Ronald W. Janetzke and Budhi Sagar, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1461-1468.

Isotope Systematics in Ground Water and Hydrogenic Deposits at ASPO, Sweden, Bill Wallin and Zell E. Peterman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p2692-2701.

Isotopic Studies of Yucca Mountain Soil Fluids and Carbonate Pedogenesis, Ted A. McConnaughey, Joseph F. Whelan, Kimberley P. Wickland and Richard J. Moscati, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2584-2589.

p230+2303. Kumar, Prasanna N. Jeffrey R. Williams, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1365-1371. Late Glacial Climate Estimates for Southern Nevada the

Ostrocode Fossil Record, Richard M. Forester and Alison J. Smith, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Commit-

tee, 1994), p.2553-2561.

Long Term Nuclear Criticality Potential in Waste Packages, Daniel A. Thomas and Thomas W. Doering, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p838-844.

The Long Term Radioactive Storage Alternative, Cyril W. Draffin, Jr., Richard G. Little and Richard Blauvelt, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p13-17.

Long Term Stability of Natural Glasses, Vladimír Knob-loch and Lumír Nachmilner, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p1066-1068.

Long-Term Evolution of the Biosphere in the Context of High-Level Waste Repository, Marianne Menut and Catherine Valentin-Ranc, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2152-2159.

Making Sense of a Sensitive Issue, Stan Reid, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p217-223

- Mapping Fractures Using Fresnel Volume Tomography, D. W. Vasco, John E. Peterson, Jr. and E. L. Majer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2648-
- Mechanical and Bulk Properties in Support of ESF Design Issues, R. H. Price, R. J. Martin, III, P. J. Boyd and J. S. Noel, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1987-1992.

Methodology of Scientific Investigations for Radioactive Waste Disposal in Geological Formations of Ukraine, D. P. Khrushchov, O. M. Kharitonov and Eu. A. Yakovlev, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1514-1520.

Modeling a Ponded Infiltration Experiment at Yucca Mountain, NV, David B. Hudson, Alan L. Flint and William R. Guertal, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2168-2174.

Modeling Heretogeneous Unsaturated Porous Media Flow at Yucca Mountain, Thomas H. Robey, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2678-2684.

Modeling Infiltration Into a Tuff Matrix From a Saturated Vertical Fracture, Clifford K. Ho, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1897-1904.

Monitored Retrievable Storage (MRS) Facility Project Status, Ronald A. Milner, Victor W. Trebules and James B. Blandford, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1358-1364.

MPC Closure Weld Model Study, Brain J. Kruse, Joe B. Stringer and Giles G. Childress, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p435-443.

Multi-Purpose Canister At-Reactor and Monitored Retrieval Storage, Tonya H. Sawyer and Robert G. Eble, Ir., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1380-1386.

Multi-purpose Canister Conceptual Design Approach, Nick L. Seagle, Giles G. Childress, III, James R. Thornton, David N. Summers and Alan H. Wells, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1143-1151.

Multi-Purpose Canister Criticality Control Design Fea-tures, James R. Thornton, Kelvin J. Montague, Alan H. Wells and Daniel A. Thomas, (High Level Radioactive Waste Pro-Waste Management, High Level Radioactive Waste Program Committee, 1994), p823-830.

Near-Field Thermal Calculations for Individual Waste Package Placement, Suresh Lingineni, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p611-618.

Negotiating Equity for Management of DOE Wastes, Sam A. Carnes, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1-8. Novel, Low-Vibration Excavation Techniques for Underground Radioactive Waste Storage, Wilhelm J. Kogel-mann, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p417-429.

Nuclear Arms Reduction, Nuclear Proliferation and High-Level Radioactive Waste Management, Daniel B. Bullen and James M. McCormick, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p30-39.

The Nuclear Regulatory Commission's Trojan Nuclear Power Plant Seismic Design Licensing Case as an Analog to Alternative Repository Licensing Strategies, Maurice Axelrad and Michael A. Bauser, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p1573-1577.

Overview of the Spanish High Level Radioactive Waste Programme, A. López and A. R. Beceiro, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2284-2290.

Paleoclimatic and Paleohydrologic Records From Secondary Calcite: Yucca Mountain, Nevada, Joseph F. Whelan, David T. Vaniman, John S. Stuckless and Richard J. Moscati, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2738-2745.

Petrographic and Geochemical Characteristics of a Section Through the Tiva Canyon Tuff at Antler Ridge, Yucca Mountain, Nevada, Frances R. Singer, Frank M. Byers, Jr., Beth L. Widmann and Robert P. Dickerson, (High Level Radioactive Waste Management, High Level Ra-dioactive Waste Program Committee, 1994), p1869-

Planning and Management of Change, Robert M. Nelson, Jr., C. Thomas Statton and Robin K. St. Clair, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1722-1730

The Politics of Nuclear-Waste Disposal, Paul Tarricone, CE Mar. 94, p56-58.

Population Estimation Techniques for Routing Analysis, Shashi K. Sathisan and Anil K. Chagari, (High Level Ra-dioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p658-665.

Potential Economic Benefits of the Yucca Mountain Project, Richard A. Babcock, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p642-649.

Potential of Vertebrate Studies for Assessing Past Climate Variations, Stephanie D. Livingston, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2562-2568.

Precipitation Kinetics of Radioactive Elements and Their Effect Upon Redox Conditions of the Nearfield, Hiroyasu Takase and Peter Grindrod, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p491-500.

Preliminary Analysis of Three-Dimensional Moisture Flow Within Yucca Mountain, Nevada, Gudmundur Bodvarsson, Gang Chen and Caroline Wittwer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2038-2047.

A Preliminary Characterization of the Spatial Variability of Precipitation at Yucca Mountain, Nevada, Joseph A. Hevesi, Dale S. Ambos and Alan L. Flint, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2520-2529

Preliminary Investigation Results as Applied to Utilization of Ukrainian Salt Formations for Disposal of High-Level Radioactive Waste, Stella B. Shekhunova, Oleg I. Petrichenko and Dmitry P. Khrushchov, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p1880-1885.

Preliminary Results of Investigation of the Ukrainian Shield Geological Formations for Radioactive Wastes Disposal, L. S. Galetsky, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1886-1890.

Preliminary U-Series Disequilibrium and Thermolumines-cence Ages of Surficial Deposits and Paleosols Associat-ed with Quaternary Faults, Eastern Yucca Mountain, J. B. Paces, C. M. Menges, B. Wildmann, J. R. Wesling, C. A. Bush, K. Futa, H. T. Millard, P. B. Maat and J. W. Whitney, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2391-2401.

Pressure-Driven Gas Flow in Heated, Partially-Saturated Porous Media, Franklin T. Dodge and Ronald T. Green, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p2217-2227.

A Probabilistic Approach to Assessing Radioactive Waste Container Lifetimes, Fiona M. Porter, Chris C. Naish and Susan M. Sharland, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1008-1013.

A Process for Integrating Public Involvement Into Technical/Social Programs, Susan Wiltshire and Carol Williams, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p275-279.

Public Opinion Polling and the Yucca Mountain Controversy: A Seven Year Inventory (12/86-8/93), Jeffery J. Himmelberger and Mike L. Baughman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p142-149.

Published Attenuation Functions Compared to 6/29/1992 Little Skull Mountain Earthquake Motion, Renner B. Hofmann and Abou-Bakr K. Ibrahim, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2402-2408.

Quest for the Perfect Cap, N. Richard Wing and Glendon

W. Gee, CE Oct. 94, p38-41.

Radiological Characterization of Hanford HLW Tank Farm Core Samples, Vojislav Banjac and A. Sharif Heger, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1110-1116.

Railroad Accident Probability Model, Phillip Fanchon and H. Barry Spraggins, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p666-670.

Reactor Life: Impacts on Waste Management, Ronald R. MacDonald and Billy M. Cole, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1562-1566.

Recent Advances in Precision Surveying Technology and Integrated Deformation Analysis, Adam Chrzanowski, W. Trevor Greening and Anna Szostak-Chrzanowski, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p721-731.

Remote Infrared System for Scanning Hazardous Waste Tanks, Kim L. H. Morris, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p1104-1109.

Results of Air-Permeability Testing in a Vertical Borehole at Yucca Mountain, Nevada, G. D. LeCain and J.N. Walker, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2782-2788.

- Results of Prototype Borehole Instrumentation at the Hydrologic Research Facility, Area 25, NTS, Joseph P. Rousseau, Mark Kurzmack and Alison Greengard, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2764-
- Robust EBS Design and Source-Term Analysis for the Partially Saturated Yucca Mountain Site, Mick Apted, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p485-490.
- The Role of Fracture Coatings on Water Imbibition Into Unsaturated Tuff, Vijay S. Chekuri, Scott W. Tyler and John W. Fordham, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1891-1896.

Role of U.S. Nuclear Regulatory Commission's On-Site Representatives in Pre-Licensing Activities for a High-Level Radioactive Waste Repository, Philip S. Justus and John Gilray, (High Level Radioactive Waste Man-agement, High Level Radioactive Waste Program Committee, 1994), p1712-1715.

Saturation Levels and Trends in the Unsaturated Zone, Yucca Mountain, Nevada, Philip H. Nelson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2774-2781.

Scaling Behavior of Gas Permeability Measurements in Volcanic Tuffs, Vincent C. Tidwell, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2500-2509.

Scenario Development for the Waste Isolation Pilot Plant: Building Confidnece in the Assessment, Daniel A. Galson and Peter N. Swift, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1350-1357.

Secretary of Energy Review of the Civilian Radioactive Waste Management Program, Christopher A. Kouts, Allen B. Benson and Patricia Van Nelson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p9-12.

Selecting the Design Basis Fuel for the Multi-Purpose Canister, Douglas A. Williamson, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p430-434.

Sensitivity of Radiological Impacts of a Waste Disposal System to Radionuclide Sorption in the Geosphere, T. W. Melnyk, J. McMurry and F. P. Sargent, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1222-1228.

Shaffer, Thomas F. R. Winston Revie and Anita Mandal, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p696-704.

Simulated Waste Package Test in Salt, Hemendra N. Kalia, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

Site Characterization and Related Activities at the Potential High-Level Radioactive Waste Repository Site at Yucca Mountain, Nevada, Carl P. Gertz, Paul L. Cloke, Robert M. Nelson, Jr. and Maxwell B. Blanchard, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2291-2296.

Site Characterization Plan Thermal Goals Reevaluation, te Characterization Fian Therman Ooals Recyatiation, Steven F. Saterlie and J. C. de la Garza, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p882-889.

Some Results from the Second Iteration of Total-System Performance Assessment for Yucca Mountain, Michael L. Wilson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1655-1662.

Spatial Distribution of Potential Near Surface Moisture Flux at Yucca Mountain, Alan L. Flint and Lorraine E. Flint, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2352-2358.

Spring Deposits and Late Pleistocene Ground-Water Levels in Southern Nevada, Jay Quade, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p2530-2537.

Staff Technical Position on Consideration of Fault Displacement Hazards in Geologic Repository Design, Keith I. McConnell and Michael P. Lee, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2257-2259.

Stakeholder Involvement in System Architecture Decisions, Dwight Shelor and Ruane Langton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1609-1613.

Stakeholder Involvement in the Evaluation of a Multipurpose Canister System, Jeffrey R. Williams, Dan Kane and Thomas B. Smith, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p182-187.

Standards for High Level Radioactive Waste Repositories, Dade W. Moeller, Martin J. Steindler, Paul W. Pomeroy and William J. Hinze, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1417-1421.

Stochastic Analysis of Unsaturated Flow and Transport With the Suflat Executive Numerical Code, Amyrossios C. Bagtzoglou, M. Rashidul Islam and Michael Muller, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p2669-2677.

Stochastic Modeling of Spatial Heterogeneities Condi-tioned to Hydraulic and Tracer Tests, Akhil Datta Gupta, D. W. Vasco, J. C. S. Long and Stratis Vomvoris, (High Level Radioactive Waste Management, High Level Ra-dioactive Waste Program Committee, 1994), p2624-2621

STRANDNET: A Top-Level Storage, TRANsportation & Disposal NETwork Systems Analysis Tool for Spent Nuclear Fuel Waste Management, Johnny Brock, Felix Godwin and Ray Mitchell, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1704-1711.

Strontium Isotope Geochemistry of Soil and Playa Deposits Near Yucca Mountain, Nevada, Brian D. Marshall and Shannon A. Mahan, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p2685-2691.

Structural Character of the Northern Segment of the Paintbrush Canyon Fault, Yucca Mountain, Nevada, Robert P. Dickerson and Richard W. Spengler, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2367-2372

Structured Tradeoffs Preference Elicitation: Evaluating CRWMS Design and Operations, Hollister Hartman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p619-626.

Subsurface Transport Modeling of the Savannah River and Yucca Mountain Sites, Bryan E. Dunlap, Darrell W. Pepper and Dale E. Stephenson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1848-1853.

gram Commune, 1974, p.100-1033.
The Sundance Fault: A Newly Recognized Shear Zone at Yucca Mountain, Nevada, R. W. Spengler, C. A. Braun, L. G. Martin and C. W. Weisenberg, (High Level Radio-active Waste Management, High Level Radio-active Waste Program Committee, 1994), p.2359-2366.

Swiss Guideline: Protection Objectives for the Disposal of Radioactive Waste, Auguste Zurkinden, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1429-1434.

System Analysis of Non-fuel Assemble Hardware and Spent Fuel Disassembly Hardware: Its Generation and Recommended Disposal, Douglas A. Williamson and James S. Tulenko, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1553-1561.

A Systems Approach to the Management of a Contaminated Metal Recycle Project, Layne Pincock and Steven Wahnachaffe, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Commit-

tee, 1994), p1069-1073.

Systems Engineering Applied to the Development of the Yucca Mountain Project Design Requirements Docu-Tucca Mountain Project Design Requirements Docu-ments, M. Sam Rindskopf and Dennis C. Royer, (*High Level Radioactive Waste Management*, High Level Ra-dioactive Waste Program Committee, 1994), p1634-1640

A Tank Moisture Model (TAMMO) for Describing Neutroan Scan Data, Edward R. Siciliano, Hans Toffer and W. Todd Watson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1102-1103.

Tank Waste Information Network System (TWINS), Gary D. Roberson, Jim Brown and Dana S. Roberson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1731Technical and Institutional Features of High-Level Radioactive Waste Management: Searching for Common Ground, Tom Isaacs, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p263-266.

Technology Development and Transfer in Environmental Management, Jonathan Katz, Alan Karnovitz and Martin Yarbrough, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p314-7-314-12.

Technology Information Transfer in Public Outreach: A New Approach, John H. Peck and Mindy L. Wadkins, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

Thermal and Seismic Impacts on the North Ramp at Yucca Mountain, M. Lin, M. P. Hardy and J. Jung, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1971-1978

Thermal Qualification Testing of Efficient Neutron Shield Materials, Richard H. Boonstra, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p765-771.

Thermal Response of the Waste Package/MPC and EBS, Robert H. Bahney, III and Thomas W. Doering, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p809-815.

Thermosyphon Analysis of a Repository: A Simplified Model for Vapor Flow and Heat Transfer, Randall D. Manteufel and Mark W. Powell, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2207-2216.

Transition from the Functional Requirements to the Technical Requirements Baseline, T. A. Mozhi, S. Douara, M. Senderling and T. Truong, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1641-1647.

A Tunnel Boring System for the Yucca Mountain Project, Steven N. Short, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p381-385.

U. S. NRC Staff Views on the Technical Bases for Yucca Mountain Standards, Margaret V. Federline, Janet P. Kotra and James R. Firth, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1422-1428.

Ultrasonic Rock Fracture Characterization, G. Danko, G. Zhan, Cs. Mezei, J. Daemen and P. Mousset-Jones, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p2789-2796.

Unsaturated Flow Experiment with Phase Change-The Heat Pipe Effect, A. Izzeldin, E. Hanson and R. Boehm. (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2475-2480.

An Updated Fracture-Flow Model for Total-System Performance Assessment of Yucca Mountain, John H. Gau-thier, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p1663-1670.

Using Planning Scenarios for DOE Radioactive Waste Management: The Case of the Advanced Neutron Source, David Lewis Feldman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1696-1703.

Utility Industry Perspectives on Repository Licensing, Christopher J. Henkel, Jay E. Silberg and Mindy A. Buren, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1567-1572.

Verification of the AECL Total System Performance Models, Keith Kersch and Steve Oliver, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p2437-2441.

Waste Package Performance Allocation System Study Report, Richard D. Memory, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p969-976.

What Do We Mean By a "Cold Repository"? William G. Halsey, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2183-2188.

Radioactive waste processing

Dry Storage of Highly Enriched Uranium Fuel, D. L. Lord, . A. Carter and L. F. Ermold, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1131-1136.

High Level Waste Disposal and Reprocessing in the UK, Nicholas L. Griffin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p1690-1695.

Immobilizing the Calcined High Level Waste in Glass and Crystalline Phases, S. V. Raman, (High Level Radioactive Waste Management, High Level Radioactive Waste

Program Committee, 1994), p1124-1130.

The Long Term Radioactive Storage Alternative, Cyril W. Draffin, Jr., Richard G. Little and Richard Blauvelt, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p13-17.

Management of HFIR Spent Fuel, Victoria M. Green, John M. Begovich, A. L. Lotts and George F. Flanagan, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p338-342.

Material Condition of Underwater Fuel and Storage Equipment, A. P. Hoskins, J. G. Scott, C. V. Shelton-Davis and G. E. McDannel, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1117-1123.

Results of Drip Tests of Sludge-Based and Actinide-Doped Glasses, J. K. Bates and E. C. Buck, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p1088-1101.

Review of Technologies and Alternatives for Dispositioning DOE/INEL Spent Nuclear Fuels, C. Lee Benedixsen, Jerry D. Christian, Arlin L. Olson and Tom R. Thomas, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p343-350.

Scenario Development for the Waste Isolation Pilot Plant: Building Confidnece in the Assessment, Daniel A. Gal-son and Peter N. Swift, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p1350-1357.

Radioactive wastes

Automation Concepts for In-Situ Waste Containment, Larry Banta and David Martinelli, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p448-456.

Computer-Aided Cleanup, Jim Williams and Barney Jones, CÉ Oct. 94, p46-49.

A Cooperative Agreement for Research on Radioactive Waste Management Between the United States Department of Energy and Atomic Energy of Canada Limited, Kenneth W. Dormuth and Robert A. Levich, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2409-2412.

Cultivating Stakeholder Interaction in Emergency Management, Wallace J. Weaver and Loretta F. Brownell, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p188-192.

Detailed Characterization and Preliminary Adsorption Model for Materials for an Intermediate-Scale Reactive-Transport Experiment, David B. Ward, Charles R. Bryan and Malcolm D. Siegel, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2048-2062.

Environmental Uses of Cement in Waste Conditioning, F. P. Glasser, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994),

An Evaluation of Rail Access Routes to Yucca Mountain, Shashi K. Sathisan and Emelinda M. Prarentela, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1270Fabrication Options for Depleted Uranium Components in Shielded Containers, Susan B. Derrington, James E. Thompson and Cameron W. Coates, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p942-948.

High Level Radioactive Waste Management, 4 vols., High Level Radioactive Waste Program Committee, (Thomas L. Sanders, chmn.), 1994, 0-7844-0022-9, 3005pp.

High-Level Radioactive Waste Curriculum Usage, Evaluation, and Customer Focus, Ginger P. King, (High Level Radioactive Waste Management, High Level Radioac-

Radioactive Waste Program Committee, 1994), p104-111.

Highway and Interline Transportation Routing Models,
David S. Joy and Paul E. Johnson, (High Level Radioactive Waste Management, High Level Radioactive Waste

Program Committee, 1994), p1263-1269.

Impact of Nuclear Waste Traffic on Highways, Peter E. Sebaaly, Raj Siddharthan and Jon A. Epps, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1255-1262

The Interactive Process: A Formal Means to Improved Relations, Allen Benson, A. C. Robison, Paul E. Seidler and Michelle D. Ulick, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p56-62.

Committee, 1994), p. 20-02. Leaching from Cementitious Waste forms in Belowground Vaults, John C. Walton, EE Nov/Dec. 94, p1507-1523. Li, Qizhi, Richard A. Schultz, (High Level Radioactive

Waste Management, High Level Radioactive Waste Program Committee, 1994), p2106-2111.

Liquid Infiltration Through the Boiling-Point Isotherm in a Desiccating Fractured Rock Matrix, O. M. Phillips, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2189-2196.

Observations of Water Movement in a Block of Fractured Welded Tuff, Falah Thamir, Edward M. Kwicklis, David Hampson and Steve Anderton, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p2020-2029.

Phenomenological Studies of Two-Phase Flow Processes for Nuclear Waste Isolation, Karsten Pruess, Stefan Fin-sterle, Peter Persoff and Curt Oldenburg, (High Level Radioactive Waste Management, High Level Radioac-

tive Waste Program Committee, 1994), p2639-2647.
Preliminary Results of Investigation of the Ukrainian Shield Geological Formations for Radioactive Wastes Disposal, L. S. Galetsky, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p1886-1890.

Regulatory Issues Associated with the Multi-Purpose Can-ister (MPC) System, John P. Roberts, Robert G. Morgan, Mary L. Birch and Linda J. Desell, (High Level Radioac-

Mary L. Birch and Linda J. Desell, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1161-1167.

Robotics and Automation for Environmental Screening and Characterization, Kelly R. Tilford, Edward W. Jaselskis, Marvin S. Anderson and Ralph E. Patterson, M. (Pachetics for Characterization). III, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Kiarer, ed., 1994), p329-337.

Simulation of Heat Transfer Around a Canister Placed Horizontally in a Drift, Samir Moujaes and Akshay Bhargava, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p801-808.

Site Characterisation and Performance Assessment in the Swiss Nuclear Waste Disposal Programme: Benefits from the Second NAGRA/USDOE Project Agreement, S. Vomvoris, P. Zuidema and P. Blümling, (High Level S. Volivoris, F. Zhicella and F. Dillings, Uright 2018.
Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2616-2623.
Spent Fuel Characteristics Relevant to High-Level Waste

(HLW) Source Term, Hersh K. Manaktala, Prasad K. Nair and Charles G. Interrante, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p560-564.

A Study of Two Phase Flow in Fracture Networks, Kenzi Karasaki, Stuart Segan, Karsten Pruess and Stratis Vomvoris, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2633-2638.

Subrepository Scale Hydrothermal Analysis in Support of Total System Performance Assessment at Yucca Mountain, Srikanta Mishra, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1202-1213.

System Implementation of the Multipurpose Canister, William R. Hollaway and Robert Rozier, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1137-1142.

Tank-Testing Crawlers, ET June/July 94, pl 1.

Testing the Spatial Neutrality of the REMI Net Migration Equation, Charles F. Barr, Nasser Daneshvary, Thomas A. Perrigo and Dan S. Rickman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p40-47.

Uniform State Registration and Permitting For High-Level Radioactive Waste Transportation, James B. Reed, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p158-162.

Actinide Recycling For Reactor Waste Mass and Radiotoxicity Reduction, A. Renard, T. Maldague, S. Pilate, J. Journet, M. Rome, A. Harislur and J. Vergnes, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1682-1209 1689

Constraining Local 3-D Models of the Saturated-Zone, Yucca Mountain, Nevada, G. E. Barr and Sharon A. Shannon, (*High Level Radioactive Waste Management*, High Level Radioactive Waste Program Committee, 1994), p1814-1821.

Enhancing Nuclear Waste Disposal Safety by Exploiting Regional Groundwater Flow—An Exploratory Proposi-tion, József Tóth and Grant Sheng, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1797-1804.

Ground-Water Recharge in Fortymile Wash Near Yucca Mountain, Nevada, 1992-93, Charles S. Savard, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1805-

Performance Assessment Model of a Single Waste Pack-age, William J. O'Connell, Tzou-Shin Ueng and Lynn C. Lewis, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1188-1194.

Radiogenic Heavy Minerals as Tools in Selective Coastal Transport, R. J. de Meijer, I. C. Tánczos and C. Stapel, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p306-

Radionuclide Release Rates From Natural Analogues of Spent Nuclear Fuel, D. B. Curtis, J. Fabryka-Martin, P. Dixon, R. Aguilar and J. Cramer, (High Level Radioactive Waste Management, High Level Radioactive Waste Management, 1994), p2228-2236.

The Reactivity Effects of Nuclide Buildup and Decay During Long-Term Fuel Storage, T. Suto, S. M. Bowman and C. V. Parks, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Com-

mittee, 1994), p831-837.

Results from the Kristallin-I Performance Assessment, Paul A. Smith, Piet Zuidema, Ian G. McKinley, Enzo Curti, Ryk A. Klos, Trevor Sumerling and Dan Galson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1648-1654

Results of Drip Tests of Sludge-Based and Actinide-Doped Glasses, J. K. Bates and E. C. Buck, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p1088-1101.

Radiography

Radiological Characterization of Hanford HLW Tank Farm Core Samples, Vojislav Banjac and A. Sharif Heger, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1110-1116.

Radioisotopes

Using Planning Scenarios for DOE Radioactive Waste Management: The Case of the Advanced Neutron Source, David Lewis Feldman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1696-1703.

Active Versus Passive Radon Monitoring at the Yucca Mountain Site, Michael D. Griffin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1953-1958.

Contribution of Waterborne Radon to Home Air Quality, Arun K. Deb, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p662-669.

Plate and Frame Membrane Air Stripping, Stephen T. Boswell and David A. Vaccari, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p726-729.

Yucca Mountain: A Potential Trade-Off in Radiological Hazards, P. Spiegler, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1959-1963.

Design and Performance of a Piled Raft Foundation, Mark Randolph and Patrick Clancy, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p314-324.

Long Term Performance of Raft and Footing Foundations Above Clayey Silt, A. O. Landva, A. J. Valsangkar and Z. Wroblewicz, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed.

and Guy V. Félio, ed., 1994), p860-874.

Measurements and Numerical Modelling of High Rise
Building Foundations on Frankfurt Clay, Eberhard Franke, Bernd Lutz and Yasser El-Mossallamy, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1325-1336.

Rail transportation

An Evaluation of Rail Access Routes to Yucca Mountain, Shashi K. Sathisan and Emelinda M. Prarentela, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1270-1277

The Key is Constructability, William J. Schmitz and Theo-dore von Rosenvinge, IV, CE Aug. 94, p54-56.

Policy Issues of Transporting Spent Nuclear Fuel by Rail, H. Barry Spraggins, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p163-167.

Rail Service to Airports, Peter B. Mandle, (Aviation Crossroads: Challenges in a Changing World, William

J. Sproule, ed., 1994), p140-149.

Rail-Air: A Multi-Modal Opportunity in a Changing World, Alastair Duff, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p150-158.

Railroad Accident Probability Model, Phillip Fanchon and H. Barry Spraggins, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p666-670.

Switzerland: Rail Access to Airports and the Fly-Luggage System, Eugene H. Jud, (Aviation Crossroads: Chal-lenges in a Changing World, William J. Sproule, ed., 1994), p159-161.

Verification Testing of Multi-Purpose Rail Cask Impact Limiters, Charles J. Temus, Ian D. McInnes, Ken Miller and Robert A. Johnson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p452-456.

Railroad engineering

Poland Gets Moving, Jeff Austin, WP Special issue 94. p35-38.

Railroad grade crossings

Rails Consolidated, Much to Homeowners' Delight, CE Apr. 94, p19.

Railroad stations

Boston's Commuter Comeback, Lawrence A. Williamson, CE Jan. 94, p66-69.

Enter the Dragon, Scott Danielson, CE Nov. 94, p64-67.
Investments in the Future, James Denning, CE July 94, p40-43.

Microtunneling Creates Pipe Roof in Record Time, CE Sept. 94, p11.

Planes, Trains and the Games, John Prendergast, CE Aug. 94, p38-41.

Railroad terminals

Deep Dig, Tight Squeeze, Joseph C. Clougherty, Richard F. O'Brien and Mark W. Pelletier, CE Aug. 94, p42-45. Putting a Historic Train Shed Back on Track, CE July 94, p22-23.

Railroad ties

Integration of Multiple Advanced Analytical Techniques to Study Alkali Silica Reactivity in Concrete Railroad Ties, R. J. Lee, A. J. Schwoeble, K. E. Wagner and J. Yuan, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p217-229.

Quarter Mile Long Machine Assists Rail Rehab, CE Apr. 94, p107.

Railroad tracks

Asphalt Applications for Railroad Maintenance and Construction, Jerry G. Rose, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p617-626.

Boston's Commuter Comeback, Lawrence A. Williamson, CE Jan. 94, p66-69.

Investments in the Future, James Denning, CE July 94, p40-43.

Technologies for Planning Railroad Track Maintenance and Renewal, Donald Uzarski and Sue McNeil, TE Sept./Oct. 94, p807-820.

Railroads

Boston's Commuter Comeback, Lawrence A. Williamson, CE Jan. 94, p66-69.

Comparison of Results from Alluvial Fan Design Methodology with Historic Data, Syndi J. Flippin and Richard H. French, IR Jan./Feb. 94, p195-210.

Rail Service to Airports, Peter B. Mandle, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p140-149.

Rail-Air: A Multi-Modal Opportunity in a Changing World, Alastair Duff, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p150-158.

Rails Consolidated, Much to Homeowners' Delight, CE Apr. 94, p19.

Rails

Bridge Rail Impact Forcing Functions, Barry T. Rosson and Ronald K. Faller, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p91-96.

Heuristic Algorithms for Aggregating Rail-Surface-Defect Data, Roemer M. Alfelor and Sue McNeil, TE Mar./Apr. 94, p295-311.

Validation of Knowledge-Based System with Multiple Bridge Rail Experts, Paul N. Roschke, TE Sept./Oct. 94, p787-806.

Rain gages

Analysis of the Causes and Triggering Events of Disastrous Torrent Flood, Milivoje Brajković and Zoran Gavrilović, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p640-644.

Rainfall

Climatic Perspective on the 1993 Mississippi R. Flood, Kenneth E. Kunkel, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p600-602.

Design Aspects of Modeling Reclaimed Water Use, Michael G. Heyl, David K. Ammerman and Jeffrey F. Payne, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p698-701.

Development of an Experimental Watershed for Testing Nonpoint Source Pollution from Urban Runoff, Vassilios A. Tsihrintzis, Hector R. Fuentes and Rizwan Hamid, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1237-1241.

Effect of Nonstandard Rainfall Distributions on Stormwater Management Detention Basins, Robert G. Traver and Ronald A. Chadderton, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p612-615.

Herbicide Leaching in a Coastal Plain Soil, W. F. Ritter, R. W. Scarborough and A. E. M. Chirnside, IR May/June 94, p634-649.

Heuristic Knowledge-base Approach to Runoff Estimation in Midwestern States Using a SCS Curve Number Method, Jaewan Yoon and G. Padmanabhan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p410-417.

Hurricane Andrew and the Central and Southern Florida Project, James W. Vearil and Christopher T. Smith, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p597-606.

Sheet Flow Resistance of Asphaltic Pavements, Joseph R. Reed, John C. Warner and Richard S. Huebner, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1100-1104.

Station-Year Approach: Tool for Estimation of Design Floods, Henri Garros-Berthet, WR Mar./Apr. 94, p135-160

A Study of Alkalinity Leaching and Residual Strength of Alkaline Stabilized Sludge, Andrew P. Kruzic and Thomas M. Petry, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p129-136.

Wet Weather Issues in Receiving Systems: Can a Pendulum Swing Upstream? Edwin E. Herricks, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p168-176.

Rainfall duration

Critical Rainfall Duration for Maximum Discharge from Overland Plane, Charng-Ning Chen and Tommy S. W. Wong, HY Sept. 93, p1040-1045.

Nonlinear Regression Applied to Hydrologic Data, Alexander C. Demetracopoulos, IR May/June 94, p652-659.

Rainfall frequency

Effect of Data Sampling Time Resolution on Probability Distribution of Elapsed Time Between Rainfalls, James W. Ellerbroek, Ben Chie Yen and Robert Riggins, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p336-340.

Jury Verdict: Frequency versus Risk-Based Culvert Design, Gary L. Lewis, WR Mar./Apr. 92, p166-184.

Nonlinear Regression Applied to Hydrologic Data, Alexander C. Demetracopoulos, IR May/June 94, p652-659.

Rainfall intensity

Critical Rainfall Duration for Maximum Discharge from Overland Plane, Charng-Ning Chen and Tommy S. W. Wong, HY Sept. 93, p1040-1045.

Efficacy of ARC/INFO GIS Application to Hydrologic Modeling, J. J. Warwick and S. J. Haness, WR May/June 94, p366-381.

Horton Infiltration Equation Revisited, A. Osman Akan, IR Sept./Oct. 92, p828-830.

Hydraulic Properties of Surface Runoff on Ash-Mixed Concrete Pavement, Reza M. Khanbilvardi and Shahriar Afshari, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p205-209.

Joint Probability Distribution of Rainfall Intensity and Duration, G. V. Loganathan and Glenda Patron, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p193-196.

Nonlinear Regression Applied to Hydrologic Data, Alexander C. Demetracopoulos, IR May/June 94, p652-659.

Rainfall-runoff relationships Combination of an Automated Channel Network Extracting System and a Distributed Watershed Model in Estimation Rainfall-Runoff Processes, Ray-Shyan Wu, Yi-Shao Lai and Cheng-Hsung Liu, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p356-360.

Computational Discretization Effect on Rainfall-Runoff Simulation, Edward Mazion, Jr. and Ben Chie Yen, WR

Sept./Oct. 94, p715-734.

Constant Time Interval Hortonian Infiltration Model, Jin Lee and Katumi Musiake, IR Mar./Apr. 94, p250-265

Effect of Data Sampling Time Resolution on Probability Distribution of Elapsed Time Between Rainfalls, James Distribution of Elapsed Time Fetween Kannatas, James W. Ellerbroek, Ben Chie Yen and Robert Riggins, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ragh R. Rumer, ed., 1994), p336-340.

Efficacy of ARC/INFO GIS Application to Hydrologic Modeling, J. J. Warwick and S. J. Haness, WR May/June

94, p366-381.

Evaluation of the Return Period of the September 1992 Flood in Genova, Italy, Paolo Bartolini and Juan B. Valdés, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p102-106.

ed., 1994), p102-109.

General Stochastic Unit Hydrograph, Allen Hjelmfelt and Menghua Wang, IR Jan/Feb. 94, p138-148.

Historical Rainfall-Runoff Analysis Using the Antecedent Precipitation Index, B. J. Doeing, R. A. Gaines and T. M. James, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1095-1099

Hydraulic Properties of Surface Runoff on Ash-Mixed Concrete Pavement, Reza M. Khanbilvardi and Shahriar Afshari, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p205-209.

Instantaneous-Unit Sediment Graph, N. S. Raghuwanshi, R. A. Rastogi and Santosh Kumar, HY Apr. 94, p495-

503

Peak Runoff Prediction for Small Rural Watersheds, James C. Y. Guo, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p604-607.

ed., 1994), pout-007.
Real-Time Flood Forecasting Using Adaptive Estimation,
Dong Kug Jeong and Ben Chie Yen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p341-345.
Representation of Spatial Variability of Rainfall in Aggre-

gated Rainfall-Runoff Models, Paolo Bartolini and Juan B. Valdés, HY Oct. 94, p1199-1219.

Streamflow Forecasting for Han River Basin, Korea, Haitham M. Awwad, Juan B. Valdés and Pedro J. Restrepo, WR Sept./Oct. 94, p651-673.

Ramos, Fidel Valdez

Philippine President Ramos Becomes ASCE Honorary Fellow, NE Sept. 94, p15.

Boating Needs Assessments (BNA) for Evaluating Boat Ramp and Facilities Needs, Jon Guerry Taylor and James Paul Posda, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p20-28.

Random processes

Conditioned Stochastic Processes for Conditional Random Fields, Hiroyuki Kameda and Hitoshi Morikawa, EM Apr. 94, p855-875.

Control of Random Crack Formation in Portland Cement Concrete Pavements, Yeou-Shang Jenq and Sang-Chel Kim, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p972-977.

Dynamic Modeling of Slab Formwork during Concrete Placement, Saeed Karshenas and Stephen M. Heinrich,

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Fitting Beta Distributions Based on Sample Data, Simaan M. AbouRizk, Daniel W. Halpin and James R. Wilson, CO June 94, p288-305.

Orthogonal Series Expansions of Random Fields in Reliability Analysis, Jun Zhang and Bruce Ellingwood, EM Dec. 94, p2660-2677.

Probabilistic Nonlocal Damage Model for Continua with Random Field Properties, J. Carmeliet and H. Hens, EM Oct. 94, p2013-2027.

Random Vortex Models in Wind Engineering, George Turkiyyah, Dorothy Reed and Jiyao Yang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

Traffic Loads on Large Bridges Modeled as White-Noise Fields, Ove Ditlevsen, EM Apr. 94, p681-694.

Random variables

Error Evaluation of Three Random-Field Generators, Gordon A. Fenton, EM Dec. 94, p2478-2497.

General Stochastic Unit Hydrograph, Allen Hjelmfelt and Menghua Wang, IR Jan./Feb. 94, p138-148.

Point-Estimate Method for Calculating Statistical Moments, K. S. Li, EM July 92, p1506-1511.

Reliability of Uncertain Nonlinear Trusses Under Random Excitation. II, R.-H. Cherng and Y. K. Wen, EM Apr. 94, p748-757.

Reliability of Uncertain Nonlinear Trusses Under Random Excitation. I, R.-H. Cherng and Y. K. Wen, EM Apr. 94,

Stochastic Vehicle-Queue-Load Model for Large Bridges, Ove Ditlevsen and Henrik O. Madsen, EM Sept. 94, p1829-1847.

Random vibration

Approximate Random Vibration Analysis of Classically Damped MDOF Systems, C. Papadimitriou and J. L. Beck, EM Jan. 94, p75-96.

Dynamic Behavior of Nonlinear Cable System. III, Dan M. Ghiocel and Dario A. Gasparini, EM Dec. 94, p2694-

Energy Method for Nonlinear Random Vibrations in MDF Systems, Long Yun Jia, EM Apr. 94, p910-916.

Energy-Based Dynamic Analysis of Secondary Systems, Genda Chen and T. T. Soong, EM Mar. 94, p514-534.

Equivalent Linearization for Seismic Responses. I: Formulation and Error Analysis, Young J. Park, EM Nov. 92, p2207-2226.

Guidelines to Minimize Floor Vibrations from Building Occupants, Sarah E. Mouring and Bruce R. Ellingwood, ST Feb. 94, p507-526.

Nonlinear Stochastic Response and Reliability of Secondary Systems, C. D. Huang, W. Q. Zhu and T. T. Soong, EM Jan. 94, p177-196.

A Probabilistic Approach to the Response of Tall Buildings to Wind Loadings, Morteza A. M. Torkamani and Ramadan S. Murad, (Structures Congress XII, N. C Baker, ed. and Barry J. Loodno, ed., 1994), p1439-1444.

Random Vibration of Beam under Moving Loads, Giuseppe Ricciardi, EM Nov. 94, p2361-2380.

Seismic Random-Vibration Analysis of Multisupport-Structural Systems, Ernesto Heredia-Zavoni and Erik H. Vanmarcke, EM May 94, p1107-1128.

Comparison of a Wave Transformation Model with LIP-11D Data, Francisco J. Rivero, Agustín S.-Arcilla and Dénes Beyer, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p518-532.

Cross-Shore Sand Transport Under Random Waves at SU-PERTANK Examined at Mesoscale, Magnus Larson and Nicholas C. Kraus, (*Coastal Dynamics '94*, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p204-219.

Decay of Random Waves on Non-Monotonic Profiles, Magnus Larson, (Ocean Wave Measurement and Analy-sis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1000, 2672, 5173. 1994), p503-517.

The Delta Flume'93 Experiment, A. S.-Arcilla, J. A. Roelvink, B. A. O'Connor, A. Reniers and J. A. Jiménez, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p488-

Distributions of Envelope and Phase in Weakly Nonlinear Random Waves, M. Aziz Tayfun, EM May 94, p1009Experimental Study of Undertow and Turbulence Intensity Under Irregular Waves in the Surf Zone, Nels J. Sultan and Francis C. K. Ting, (Ocean Wave Measurement and and Francis C. R. Ting, (Occur wave measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p602-613.
Hydrodynamics of Random Wave Boundary Layers, B. A. O'Connor, H. Kim and J. J. Williams, (Coastal Dynamics of Candol L. Scott and Cando

ics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p879-893.

Nonlinear Effects on Wave Envelope and Phase, M. Aziz Tayfun, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p755-768

Nonlinearity in Wave Crest Statistics, David L. Kriebel and Thomas H. Dawson, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hems-

ley, ed., 1994), p61-75.

Principal Components Time Spectra of Suspended Sediment in Random Waves, Onyx W. H. Wai, Keith W. Bedford and Sean T. O'Neil, (Coastal Dynamics '94, A. S-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p296-305. Spectral Boussinesq Modelling of Breaking Waves, J. A. Battjes, Y. Eldeberky and Y. Won, (Ocean Wave Meas-

urement and Analysis, Orville T. Magoon, ed. and J. Mi-

chael Hemsley, ed., 1994), p813-820.

A Spectral Wave Model for the Coastal Zone, L. H. Holthuijsen, N. Booij and R. C. Ris, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p630-641.

Volterra Models of Ocean Structures: Extreme and Fatigue Reliability, S. R. Winterstein, T. C. Ude and T. Marthin-sen, EM June 94, p1369-1385.

Range management

Range Estimating - User-Friendly Risk Analysis, Kevin M. Curran, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p47-54.

Rapid transit systems

Enter the Dragon, Scott Danielson, CE Nov. 94, p64-67. Marta North Line Midtown Station, Jerzy T. Jacak and Cheryl L. McAfee, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p176-181.

Emission-Cost Trade-offs and Rate Feedback for Electric Utilities, Benjamin F. Hobbs, EY Dec. 94, p103-121.

Setting Competitive Water Reuse Rates, David D. Green and Stephen H. Riley, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p802-805.

Settlements of Highway Embankments on Soft Lacustrine Deposits, Loren R. Anderson, Casan L. Sampaco, Syed H. Gilani, Edward Keane and Loren Rausher, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p376-397.

Ratings

Bridge Rating Using Influence Surface for Curved Bridge Structures, C. C. Fu, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p688-695.

Comparison of Bridge Deterioration Rates, David Veshosky and Carl R. Beidleman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p296-301.

Different Approaches to Rating Slab Bridges, Vikas Huria, Kuo-Liang Lee and Ahmet E. Aktan, ST Oct. 94, p3056-3062.

Old Concrete Slab Bridges. I: Experimental Investigation, A. Azizinamini, T. E. Boothby, Y. Shekar and G. Barnhill, ST Nov. 94, p3284-3304.

Old Concrete Slab Bridges. II: Analysis, A. Azizinamini, Y. Shekar, T. E. Boothby and G. Barnhill, ST Nov. 94,

p3305-3319.

Overweight Trucks and Safety of Bridges, Gongkang Fu and Osman Hag-Elsafi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p284-289.

Raw materials

The Use of Secondary Products in the Cement and Concrete Industry, Bjarne Osbaeck, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p107-121. Rayleigh waves

A Comparison of Wave Statistics in Uni- and Multidirectional Shoaling Seas, Andrew M. Cornett and Okey G. Nwogu, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p458-473.

Effects of Multiple Modes on Rayleigh Wave Dispersion Characteristics, Kohji Tokimatsu, Shuji Tamura and

Hisaya Kojima, GT Oct. 92, p1529-1543.

Liquefaction-Induced Damage to Buildings in 1990 Luzon Earthquake, Kohji Tokimatsu, Hisaya Kojima, Shinichi Kuwayama, Akio Abe and Saburoh Midorikawa, GT Feb. 94, p290-307.

Wave-Height Distribution in Storm Sea: Effect of Wave Breaking, Malcolm O. Green, WW May/June 94, p283-

Reactor cores

System Analysis of Non-fuel Assemble Hardware and Spent Fuel Disassembly Hardware: Its Generation and Recommended Disposal, Douglas A. Williamson and James S. Tulenko, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1553-1561.

Ready mixed concrete

Emergency Repairs for Storrow Drive Tunnel, Paul L. Kelley, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1103-1110.

Extended Set Control of Concrete, Emmanuel K. Attiogbe and Hamid Farzam, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p137-146.

Macro-Roughness Effects on Stream Reaeration, Douglas B. Moog and Gerhard H. Jirka, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p994-998.

Real-time programming

BPA Realtime Hydrologic Forecasting System for the Columbia River Basin, L. von der Heydt, L. E. Brazil and K. Jawed, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p5-8.

Computer Control of CSOs, Russell W. Batzell, CE Nov. 94, p58-59.

Design and Implementation of an Optimal Real-Time Hydropower Generation Scheduling System for the Lower Colorado River in Texas, Quentin W. Martin, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p169-

Digital Signal Processing Techniques for Active Structural Control, B. F. Spencer, Jr., P. Quast, S. J. Dyke and M. K. Sain, (Analysis and Computation, Franklin Y. Cheng,

ed., 1994), p327-336.

Flood Monitoring Network In Southeastern Louisiana, Brian E. McCallum, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p346-350

GPS Goes Real Time, Carl W. Sumpter and Gregory W. Asher, CE Sept. 94, p64-66.

A High Level and Real Time Integration Approach for CAD Systems, Mustafa Alshawi, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1779-

An Integrated Approach to the Real-Time Control of Water Supply and Distribution Systems, Chun-hou Orr and Bryan Coulbeck, (Water Policy and Management: Solv ing the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p850-854.

Onika: A Multilevel Human-Machine Interface for Real-Time Sensor-Based Systems, Matthew W. Gertz and Pradeep K. Khosla, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p28-36.

Real-Time Control for a Robotic Rebar Bender, Phillip S. Dunston and Leonhard E. Bernold, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p392-400.

Real-Time Control of Aerobic-Anoxic Sludge Digestion Using ORP, David G. Wareham, Kenneth J. Hall and Donald S. Mavinic, EE Jan./Feb. 93, p120-136.

Real-Time Decision-Support System for Freeway Manage-ment and Control, Hongjun Zhang and Stephen G.

Ritchie, CP Jan. 94, p35-51.

Real-time Motion Vision for Robot Control in Unstruc-tured Environments, John Woodfill, Ramin Zabih and Oussama Khatib, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p10-18.

Reservoir Operation Using Bayesian Inferencing and Balancing Rules, Emmanuel U. Nzewi, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p173-176.

A Satellite Based River Forecast System for the Nile River, Victor Koren and Curtis B. Barrett, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p9-12.

Strategic Ship Routing Impacts of Temporal Coverage with Real-time Satellite Altimeter-Based Current Information, Young-Kyun Lee, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p483-489.

Streamflow Forecasting for Han River Basin, Korea, Haitham M. Awwad, Juan B. Valdés and Pedro J. Restrepo,

WR Sept./Oct. 94, p651-673.

- A Surface Exploration Vehicle Testbed for Real-Time Control Exerimentation, Songjae Lee, R. Michael Brown, Ta-Yu Yuan, Chih-Kang Chao, Dhaval Patel, Gordon K. Lee and Robert B. Kelley, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1333-1344.
- Timing Analysis of a Multiprocessor Architecture for Active Control, John W. Baugh, Jr. and Wael M. Elseaidy, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p203-212.

Receiving waters

Wet Weather Issues in Receiving Systems: Can a Pendulum Swing Upstream? Edwin E. Herricks, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p168-176.

Recharge basins

Optimum Operation of Recharge Basins, Hasan Mushtaq, Larry W. Mays and Kevin E. Lansey, WR Nov./Dec. 94, p927-943.

Recharge wells

Density-dependent Circulation in Desert-basin Aquifers with Isotropic Self-Similar Permeability Distributions, Gilberto E. Urroz and Daoqiong Yang, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p87-91.

Development of an Intergovernmental Agreement For a Major Multi-Party Recharge Project in Central Arizona, Richard S. Siegel, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p533-536.

Recirculation

In Situ Treatment of VOCs by Recirculation Technologies, O. F. Webb, R. L. Siegrist, M. R. Ally, W. E. Sanford, P. M. Kearl and J. L. Zutman, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p572-579.

Reclamation

Gully Erosion Minimization on Reclaimed Surface Mines Using SSAST Computer Model, Rose A. McKenney and Thomas W. Gardner, IR Sept./Oct. 94, p910-924.

Managing the Russian River Aggregate Resources, James J. Jordan, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p838-841.

Marine Recreation Project of the City of Yokohama - Ma-rine Park and Hakkei Island -, Tohru Yano, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p577-586.

New Way to Stabilize Clay, ET Aug./Sept. 94, p11.

Planting of Large-Scale Marsh Projects, Eddie Seidenstick-er, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p828-832.

Poplar Island Reclamation and Beneficial Uses of Dredged Material, Edward T. Fulford, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1406-1415.

The Small Reclamation Projects Loan Program A Development Tool For The 90's, Loretta C. Lohman, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p119-

Wastewater Reclamation at Davenport, Washington, Douglas L. Smith, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p834-837.

Wetlands Return to Former Mining Site, CE Oct. 94, p25.

Reconstruction

Boston's Commuter Comeback, Lawrence A. Williamson,

CE Jan. 94, p66-69.

Brief History of the Port of Sines and General Presentation of West Breakwater, Manuel Dinis C. Dias and Jeno F. Toppler, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p3-24.

Historic Yorktown: New Bridge Keeps Old Design, Mi-chael J. Abrahams, CE Nov. 94, p46-47.

Molhe Oeste Do Porto De Sines Reabilitação Definitiva Fiscalização Da Construção, Joaquim da Silva Pinto, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p229-264

Overview of the Sines West Breakwater Reconstruction, Orville T. Magoon, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p1-2.

Polystyrene Blocks Support Sinking Roadway, CE Oct. 94.

p86.

Port of Sines West Breakwater Rehabilitation Repair Works (1990 - 1992), Carlo Alberto Segarelli, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway Port, Coastal, and Ocean Division of ASCE, 1994), p205-228

Port of Sines West Breakwater Rehabilitation Strategy Selected, Manuel Dinis C. Dias, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p25-34.

Reconstruction of the Dewey Square Tunnel, Brian Bren-ner, Dincer Akyali and Paul Moyer, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p772-780.

Short Synthesis of Some Studies Carried Out for the Repairing of Sines Port West Breakwater, G. Paolella and S. Corsini, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p70-98.

Trenchless Sewer System Reconstruction Techniques, Lynn E. Osborn, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p159-172.

West Breakwater of the Port of Sines Final Rehabilitation Inspection of the Construction, Joaquim da Silva Pinto, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p265-301.

Recording systems

Development of a Visual Method to Track the Movement of Hydrogen Bubbles in a Laboratory Flume, Athanasios N. Papanicolaou and Panayiotis Diplas, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p205-212.

A New Correction Procedure for Shipborne Wave Recorder Data, E. G. Pitt, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p726-739.

Records management

A Computerized Open Channel Flow Measurement Device, Stan E. Malinky, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p27-36.

Contractors' Construction-Claims Avoidance, George F. Jergeas and Francis T. Hartman, CO Sept. 94, p553-560.

Evaluation of Code Accidental-Torsion Provisions from Building Records, Juan Carlos De la Llera and Anil K.

Chopra, ST Feb. 94, p597-616.

Facilitate Delay Claim Analysis with As-Built Schedule Databases, John R. Knoke and Gary H. Jentzen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2104-2111.

Firm Plugs in to Electronic Time Sheets, ME Nov./Dec. 94,

An Infrastructure Records Management System Using PCbased Image Scanning Technology, Stephen M. Benz, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1806-1811.

An Interactive Computer Code for Generations of Artificial Earthquake Records, D. L. Karabalis, G. J. Cokkinides, D. C. Rizos, J. S. Mulliken and R. Chen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1115-1122.

Recovery planning

State of the Harbor May Be Improving, CE Nov. 94, p8.

A California First: Engineered, CE Dec. 94, p12,14.

Community Greenways are Linear Recreationways, Robert D. Espeseth, (Marinas, Parks and Recreation Develop ments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p520-525

Exemplary Plans of a Fisharina in Japan, Takeshi Kawagu-chi, Hideki Hata and Yasuhiro Yoshizuka, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p211-221.

Fisharina Policies in Japan, Noboru Oshima, Sanji Kida,

Motobumi Manabe and Nobuo Mikami, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and

Fred A. Klancnik, ed., 1994), p201-210.

Lake Ontario Regulation Utilizing an Expert System Approach Constrained by Interest Satisfaction Relationships, Anthony J. Eberhardt, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p149-152.

Linking Linear Greenways To Communities, Brian R. Kliesmet, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed.,

1994), p514-519.

Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994, 0-7844-0028-8, 620pp.

Marine Recreation Project of the City of Yokohama - Marine Park and Hakkei Island - Tohru Yano, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p577-586.

Missouri River Economic Impacts Model, Charles Hillerson and Ronald Roberts, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p637-640.

Missouri River Recreation Economic Analysis, Ronald C. Roberts and R. Scott Jackson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p681-685.

Planning and Improvement of Coastal Area Utilization, Masatsugu Fukuya, Junji Tanaka, Shigeki Nakamura, Toshiya Taneichi and Hideyuki Kida, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p222-231.

Using Geographical Information Systems to Manage a Multipurpose Water Project, Stan B. Mattingly, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p33-36.

Waterfronts: GATEWAY to Your Community, Allyson Forsythe-Fiene, Robert D. Espeseth and Joseph T. O'Leary, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p449-459

"A Comparison of Characteristics and Economic Expenditures of Boat Show Patrons At Two Types of Boat Shows", Mary H. Bielen, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p248-256.

Recreation demand

Balancing Environmental Issues when Developing the Marina Project Scope, Jon Guerry Taylor, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p69-76.

Current Trends in Waterpark Development, Terry R. Barnhart, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994),

p434-438.

Design and Technological Opportunities at Waterparks: The Hyland Hills' Water World Experience, Terry R. Barnhart, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p83-92.

The Evolving Role of Marinas as Public Marine Parks and Water Recreation Areas in Southern California 1960-1994, John C. Corrough, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A.

Klancnik, ed., 1994), p39-48.

Master Planning -- "Fact or Fiction", Marcus D. Hodges, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p77-82.

The Value of Illusion vs. the Illusion of Value - The Full Range of Recreational Amenities that are Needed for the Marina of Today and Tomorrow, Daniel S. Natchez, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p232-237.

Visitor Usage Analysis as Basis for Marina Expansion, William E. McCleish and John C. Corrough, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p597-604.

Recreational facilities

1993 Recreational Vehicle (RV) Park Census in Beatty and Pahrump, Nevada, Lloyd E. Levy and Marcia D. Housel, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p48-55.

Applying Dredged Material to Recreation Area Development, Russell K. Tillman and Thomas R. Patin, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p271-282.

Balancing Recreational, Economic Development and Environmental Protection Goals for New Recreational Boat-ing Facilities in the State of Wisconsin, U.S.A. Fred Klancnik, James Rooney and Larry Freidig, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p7-19.

Boating Needs Assessments (BNA) for Evaluating Boat Ramp and Facilities Needs, Jon Guerry Taylor and James Paul Posda, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik,

ed., 1994), p20-28.

Concept for a Mixed Use Recreational Harbor on Lake Superior, Kenneth M. Cobb and Dorian Grilley, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p104-113.

Current Trends in Waterpark Development, Terry R. Barnhart, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p434-438.

The Day User, Marcus D. Hodges, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p506-513.

Design and Technological Opportunities at Waterparks: The Hyland Hills' Water World Experience, Terry R. Barnhart, (Marinas, Parks and Recreation Develop ments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p83-92.

Effects of Golf Course Management on Pesticide and Fertilizer Fate, S. K. Starrett, N. E. Christians and T. A. Austin, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p526-533.

Financing Construction and Operation Costs for Parks and Recreation Facilities, Richard Milbrodt, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p360-369.

Framework and Status of the ASCE Parks & Recreation Planning Guide, Marshall Flug, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred

A. Klancnik, ed., 1994), p187-195.

Harborside International Golf and Marina Facility, Frank L. Kudrna, Jr. and Richard P. Nugent, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p124-131. Horticultural, Botanical & Environmental Resources, Di-

ane S. Lindsley, (), p534-535.

King Harbor Mole Repair Redondo Beach, California, Clark B. Adams, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p283-291.

Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994, 0-7844-

0028-8, 620рр.

Master Planning -- "Fact or Fiction", Marcus D. Hodges, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p77-82.

Milwaukee County Parks' Brown Deer Golf Course Lands P. G. A. Tour Event: A Gem of a Golf Course is Polished to a New Brilliance, Steve Bailey, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p536-543.

P3 for Marinas, Parks & Recreation, Richard Milbrodt, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p180-186.

Pot-Nets, Delaware, Wetland Habitat and Beneficial Uses of Dredged Material Project, Edward T. Fulford and Robert E. Tunnell, Jr., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1451-1460.

Pros and Cons of Developing Recreational Facilities on Closed Landfills, Michael S. Golden, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p257-260.

Sedimentation and Remediation Aspects of Recreation Lakes, Satya Vasireddy, Ashok Medhi and Anand Prakash, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1136-

Site Selection for Beneficial Uses Of Dredged Material in Galveston Bay, Texas, USA, Russell Swafford and Richard F. Gorini, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p399-409.

A Suggested International Classification of Marinas, Jon Guerry Taylor, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed.,

1994), p140-143.

The Value of Illusion vs. the Illusion of Value - The Full Range of Recreational Amenities that are Needed for the Marina of Today and Tomorrow, Daniel S. Natchez, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p232-237.

Visitor Usage Analysis as Basis for Marina Expansion, William E. McCleish and John C. Corrough, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p597-604.

Recruiting

Digger's Decline: A Fable for Civil Engineers, John A. Alexander, EI July 93, p304-308.

Six Steps to Better Recruiting, Bob Burfeind, ME Nov./ Dec. 94, p14-16.

Women Engineers: Why So Few? National Academy of Sciences, ME Sept./Oct. 94, p20-23.

Recursive functions

Prediction of Deep-Bed-Filter Performance Using Recur sive Algorithms, C. S. P. Ojha and N. J. D. Graham, EE July/Aug. 94, p961-971.

Recycling

Actinide Recycling For Reactor Waste Mass and Radiotoxicity Reduction, A. Renard, T. Maldague, S. Pilate, J. Journet, M. Rome, A. Harislur and J. Vergnes, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1682-

Applying Dredged Material to Recreation Area Development, Russell K. Tillman and Thomas R. Patin, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p271-282.

Construction Use of Polyester Composite Using Recycled PET, Karim S. Rebeiz, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p80-87.

Environmental Collective Action: Residential Recycling Programs, Jess W. Everett, El Apr. 94, p158-176.

Environmental Issues and Management of Concrete Waste in Japan, Yoichi Nojiri, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p424-437. From King of the Road to 'Six Feet Under', CE Sept. 94,

Indestructible Drainpipes, ET June/July 94, p11.
Making Sense of a Sensitive Issue, Stan Reid, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p217-223.

Milk Jugs, Soda Bottles and Concrete, CE Dec. 94, p8 Molten Metal Bath Cleans Up Toxics, CE Jan. 94, p21-22. Not Just Wallowing in the Mire, CE Aug. 94, p8.

Off-Gas Recycle for VOC Emission Control: Conceptual Model, Yerachmiel Argaman and Jack L. Musterman, EE May/June 94, p573-587.

Properties of High Fly Ash Content Cellular Concrete, Ronald D. Neufeld, Luis E. Vallejo, Wenyi Hu, Martin Latona, Christopher Carson and Christopher Kelly, EY Apr. 94, p35-48.

Proposed Rule on Recycled Geotextiles Stirs Controversy, CE Oct. 94, p14,17.

Recovery and Recycling of Copper from Wastewater using Iron Coated GAC, Kotha P. Reddy, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p392-399

Recycled Engineering Applied to the First Lunar Outpost, Todd C. Parfet and Belinda S. Deeds, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p988-997.

Recycled Material, William A. Mallow, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p828-835.

Recycling Center Digs Diamonds From the Rough, CE Oct. 94, p20-21

Recycling Portland Cement Concrete Pavement at the Contractor's Option, Richard R. Reusser, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p86-91.

Recycling Rate May Have Peaked, CE Dec. 94, p8. Reinforcing Sand With Strips of Reclaimed High-Density Polyethylene, Craig H. Benson and Milind V. Khire, GT May 94, p838-855

Reuse, Recycle, Radiate, ET Apr./May 94, p11.

Second Life for Spent Sand, CE Oct. 94, p8. Shear Design Guidelines for Polyester Concrete Using Recycled Plastic, K. S. Rebeiz, S. P. Serhal and D. W. Fowler, (Structures Congress XII, N. C. Baker, ed. and

Barry J. Loodno, ed., 1994), p821-826. Special Considerations in the Design of Connections for Recycled Wood/Plastic Composite Lumber, George H. Kyanka, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p929-933.

Start-ups, CE May 94, p8.

Strategy for Beneficial Use of Stoker-Boiler Coal Ash, Christina B. Behr-Andres, Gordon K. Parish and Neil J. Hutzler, EE Mar./Apr. 94, p401-415.

Structural Behavior of Polymer Concrete Beams Using Recycled Plastic, Karim S. Rebeiz, Sleiman P. Serhal and David W. Fowler, MT Feb. 94, p150-165.

Sustainable Development? Begin with Recycled Paper, CE Jan. 94, p28.

A Systems Approach to the Management of a Contaminated Metal Recycle Project, Layne Pincock and Steven Wahnachaffe, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1069-1073.

Tire Chips Used as Pothole Preventers, CE Dec. 94, p19. Trash Creates the Sound Wall of Silence, CE Sept. 94, p8. The Use of Secondary Products in the Cement and Concrete Industry, Bjarne Osbaeck, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p107-121.

Use of Waste Rubber in Light-Duty Concrete Pavements, Richard R. Schimizze, James K. Nelson, Serji N. Amirkhanian and John A. Murden. (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p367-374.

Utilization of Fossile Fuels Combustion Waste, Ivan Odler, (Cement Manufacture and Use, Paul W. Brown, ed.,

1994), p57-73.

Utilization of Phosphogypsum-Based Slag Aggregate in Portland Cement and Asphaltic Concrete Mixtures, Paul T. Foxworthy, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p75-

Utilization of Waste Materials in Highway Construction, Serji Amirkhanian and David Manugian, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p919-927.

Utilization of Waste Solvent Fuels in Cement Manufacturing, Gregory S. Barger, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p41-55.

Wastewater is No Waste if It's Reused, CE Dec. 94, p14.

Boston's Backup Water Supply, Lawrence J. Bergen, CE Mar. 94, p66-68.

Impulse Effect on Redundancy of a Tied-Arch Bridge. Leon L-Y. Lai, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p712-719.

Redundancy-Constrained Minimum-Cost Design of Water-Distribution Nets, Heekyung Park and Jon C. Liebman, WR Jan./Feb. 93, p83-98.

Reefs

A California First: Engineered, CE Dec. 94, p12,14.

Coal Ash and Dredged Material in Reef Construction, William B. Baker, Jr. and Richard F. Gorini, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p664-672.

Habitat Value of Offshore Dredged Material Berms for Fishery Resources, Douglas Clarke and Richard Kasul, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p938-945

Wave Transformation and Load Reduction Using a Small Tandem Reef Breakwater – Physical Model Tests, Andrew Cornett, Etienne Mansard and Edgar Funke, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p1008-1023.

Reflectance

Effects of Dust and Thermal Cycling on Telescope Mirror Performance, Koon Meng Chua, R. Eric Pease and Stewart W. Johnson, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p916-932.

Analytical and Experimental Analyses of Fatigue Crack Propagation in Asphalt Concrete Overlays, R. Ballarini, G. C. Ferrante and J. L. Figueroa, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994),

Effects of Force Reflection on Telerobotic Performance, Raymond Dick, Terry Faddis and Bill Barr, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p259-268.

Roof-Project Coordinator Recalls Good Times (ltr), CE Apr. 94, p35.

Wave Measurement Near Reflective Structures, P. A. D. Bird, M. A. Davidson, G. N. Bullock and D. A. Huntley, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p701-711.

Regeneration

Effects of Oxidant on Thermal Regeneration of Granular Activated Carbon, Mark A. Waer and Vernon L. Snoeyink, EE Jan./Feb. 94, p190-201.

Regional analysis
Breakout Session 5C: Regional Modeling, Jon Anderson, Richard Burkhart and Gus von Bodungen, (Transporta-tion Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p158-160.

An Interactive Regional Regression Approach to Estimat-ing Flood Quantiles, Gary D. Tasker and Raymond M. Slade, Jr., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p782-785.

Modeling Regional Flow and Flow to Drains, G. M. Pohll and J. C. Guitjens, IR Sept./Oct. 94, p925-939

A Regional Model of Daily Streamflow for the Northeast United States, Neil M. Fennessey and Richard M. Vogel, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p794-797.

Report Recommends 'Tailored' Infrastructure, CE June 94,

Susceptibility of Reservoirs to Drought Using Palmer Index, William K. Johnson and Roger W. Kohne, WR May/June 93, p367-387.

Regional development

Exemplary Plans of a Fisharina in Japan, Takeshi Kawagu-chi, Hideki Hata and Yasuhiro Yoshizuka, (*Marinas*, *Parks and Recreation Developments*, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p211-221.

Governmental Priorities in Irrigation Project Selection in Indonesia, Sutardi and I. C. Goulter, WR May/June 93,

p406-411.

Regional Wastewater Reuse in the Nueces Estuary, Kelly D. Payne and Samuel K. Vaugh, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p774-777.

Regional planning
Breakout Session 5C: Regional Modeling, Jon Anderson, Richard Burkhart and Gus von Bodungen, (Transporta-tion Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p158-160.

The Future of the Past: Historic Preservation at the Metro-Deficient of the Fast. Fistoric Preservation at the Metro-politan Washington Airports, H. Henry Ward, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p8-17.

Getting the Project Started, Daniel G. Hacker, (Aviation Crossroads: Challenges in a Changing World, William

J. Sproule, ed., 1994), p1-7.

Management of Dredged Material Disposal for San Fran-cisco Bay Projects, Thomas H. Wakeman and Jacob Harari, (Dredging '94, E. Clark McNair, Jr., ed., 1994),

When the Levee Breaks, James Denning, CE Jan. 94, p38-

Registration

No Registration, No Arbitration, CE Nov. 94, p26.

Understanding ISO, Virginia Fairweather, CE Feb. 94,

Uniform State Registration and Permitting For High-Level Radioactive Waste Transportation, James B. Reed, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p158-162.

Regression analysis

Command Area Water Demands. II: Water-Demand Function, Seigo Yamashita and Wynn R. Walker, IR Nov./ Dec. 94, p1043-1055

Estimating Hydraulic Conductivity of Compacted Clay Liners, Craig H. Benson, Huaming Zhai and Xiaodong Wang, GT Feb. 94, p366-387.

Investigation of Saltating Particle Motions, Hong-Yuan Lee and In-Song Hsu, HY July 94, p831-845.

New Methodology for Modeling Annual-Aircraft Emis-sions at Airports, B. Gordon Woodmansey and Judith G. Patterson, TE May/June 94, p339-357.

Nonlinear Regression Applied to Hydrologic Data, Alexander C. Demetracopoulos, IR May/June 94, p652-659.

- Prediction of Land Subsidence due to Ground-Water Use in Snow Country, Kazumasa Mizumura, HY Apr. 94, p448-460.
- Sediment Transport Analysis Rio Grande Floodway at San Marcial Gauge, Mohammed A. Samad, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), pl 115-1119.
- Statistical and GIS Tools for Assessing Water Conservation Effects, Pen C. Tao, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p416-419.
- Ultimate Resistance of Unstiffened Multiplanar Tubular TT- and KK-Joints, Joop C. Paul, Yuji Makino and Yoshiaki Kurobane, ST Oct. 94, p2853-2870.
- Wetland Loss Rates and Agricultural Drainage, Aaron J. Douglas, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p545-548.

Regression models

- Experimental Measurements of Dynamic Loads Imposed by Moving Crowds, A. Ebrahimpour, R. L. Sack, W. N. Patten and A. Hamam, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1385-1390.
- An Interactive Regional Regression Approach to Estimating Flood Quantiles, Gary D. Tasker and Raymond M. Slade, Jr., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p782-785.
- Low-Flow Frequency Analysis with Censored Data, Chuck Kroll and Jery Stedinger, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p786-789.
- Peak Runoff Prediction for Small Rural Watersheds, James C. Y. Guo, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p604-607.
- Plate and Frame Membrane Air Stripping, Stephen T. Boswell and David A. Vaccari, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p726-729.
- Severity Measures in Side-Impacts with Narrow Roadside Structures, M. H. Ray, J. F. Carney, III, M. I. Faramawi and L. A. Troxel, TE Mar./Apr. 94, p322-338.
- Use of Gel-Permeation Chromatography in Predicting Properties of Asphalt, Norman W. Garrick, MT Aug. 94, p376-389.

Regulation

- Administering a Regulated Riparian System of Water Rights, Joseph W. Dellapenna, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p881-884.
- Avoiding Dual Regulation of the Civilian Radioactive Waste Management Program, John G. Vlahakis and Ricardo J. Palabrica, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p.1593-1596.
- Control of Disinfection By-Products in Drinking Water, Philip C. Singer, EE July/Aug. 94, p727-744.
- Focus on High-Level Waste Repository Management and Regulation a Rate Regulator's Perspective, Emmit J. George, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1521-1525.
- Historical, Current and Upcoming Regulation Schedules for Lake Okeechobee, Vinio Floris, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p53-56.
- The ICR; \$130 Million of Water Quality Monitoring, Albert Ilges and Fredrick W. Pontius, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p788-791.
- Interactive Models for the Regulation of Lake Ontario, Anthony J. Eberhardt, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p105-109.

- Nuclear Regulatory Commission Staff Approaches to Improving the Integration of Regulatory Guidance Documents and Prelicensing Reviews, Robert L. Johnson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1604-1608.
- The Regulation of Lake Ontario During the Spring of 1993; a Period of Record Supplies, Anthony J. Eberhardt and Peter P. Yee, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p187-191.
- SCADA System Controls Combined Sewer Overflow Regulation System to Optimize Wastewater Collection, Russell W. Batzel, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p822-828.

Regulations

- Assessing Roughing Filtration Design Variables, Jennifer O. Cole, Catherine Westersund and M. Robin Collins, Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p170-177
- Beneficial Use Alternatives for Water Treatment Plant Residuals, Ann M. Copeland, Carel Vanderneyden and David A. Cornwell, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p137-145.
- Bromine Distribution Factors in THM Formation, Paul H. Hutton and Francis I. Chung, WR Jan./Feb. 94, p1-16.
- Clean Water Act Reauthorization: The States' Perspective, Roberta Haley Savage, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p34-52.
- Clinton Seeks End to Unfunded Mandates, CE Mar. 94, p114.
- Compliance With Arsenic Regulations Could Cost Billions, CE Sept. 94, p19-20.
- Computer-Based Advisors for Environmentally Conscious "Green" Product Design, Antonio Diaz-Calderon, Steven Fenves, James Garrett and Chris Hendrickson, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1497-1504.
- Contaminated Dredged Sediment Disposal Criteria, G. Fred Lee and Anne Jones-Lee, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p121-130.
- Critique: Rebuilding and Recovery, Ben L. Sill, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p300-302.
- Design Aspects of Modeling Reclaimed Water Use, Michael G. Heyl, David K. Ammerman and Jeffrey F. Payne, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p698-701.
- Development and Application of Long Range Study (LRS) Model for Missouri River System, George A. Patenode and Karen L. Wilson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p677-680.
- Development of Missouri River Navigation Analysis, David Gjesdahl and Arthur Hawnn, (*Water Policy and Management: Solving the Problems*, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p686-689.
- EPA's Regulatory Process: A New Way of Doing Business, Tudor T. Davies and Timothy J. Kasten, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p123-123
- Integration of Regulations and Science for HLW Disposal, Lawrence D. Ramspott, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p292-295.
- Intentions and Credences An Australian Approach to Computerised Building Regulation, Jane Blackmore, Frank Leong and Ron Sharpe, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p131-136.
- Land Development Regulations: Roadblock to Affordable Housing, Thomas J. Olenik and S. L. Cheng, UP Mar. 94, p22-27.

Laws and Regulations Regarding Wetland Mitigation and Mitigation Banking, John D. Rogner, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p333-341. Limitations on Scientific Prediction and How They Could

Affect Repository Licensing, Richard A. Van Konynen-burg, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p285-291.

Meeting 503 Regulations for Ten Biosolids Incinerators (And Associated Stories), Mark Prentice, Norman LeBlanc, Thomas E. Sadick and F. Michael Lewis, (Critical Issues in Water and Wastewater Treatment, Joseph

N. Ryan, ed. and Mare Edwards, ed., 1994), p114-121.
National Water Resources Regulation: Where is the Environmental Pendulum Now? Howard Holme, ed., 1994,

0-7844-0045-8, 275pp.

NPDES Storm Water Permit Compliance at Air Force In-stallations, Paul Makowski and Marvin Smith, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1224-1228.

The Nuclear Regulatory Commission's Trojan Nuclear Power Plant Seismic Design Licensing Case as an Analog to Alternative Repository Licensing Strategies, Maurice Axelrad and Michael A. Bauser, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1573-1577.

A Parameter Network and Model Pyramid for Managing Technical Information Flow, Scott Sinnock and Hollister A. Hartman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Commit-

mental Pendulum Now?, Howard Holme, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p1-14.

Protecting Human Health: Keeping Science in Risk Assessment and Balance in Risk-Based Regulations, Robert G. Tardiff, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p96-106.

Purpose and Perspective for the Conference: "National Water Resources Regulation - Where is the Pendulum Now?", Jonathan E. Jones, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p15-19.

Recycling Center Digs Diamonds From the Rough, CE

Oct. 94, p20-21.

Removal of Bromate After Ozonation by Electron Beam Irradiation, M. Siddiqui, G. Amy, W. Cooper, C. Kuruz and T. Waite, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p654-661.

Repository Criticality Safety for the DOE Spent Nuclear Fuel Program, Dennis Evans and Brian Palmer, (High Level Radioactive Waste Management, High Level Ra-

dioactive Waste Program Committee, 1994), p852-859. Review of Technologies and Alternatives for Dispositioning DOE/INEL Spent Nuclear Fuels, C. Lee Benedixsen, Jerry D. Christian, Arlin L. Olson and Tom R. Thomas, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

Scenario Development for the Waste Isolation Pilot Plant: Building Confidnece in the Assessment, Daniel A. Galson and Peter N. Swift, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Management, High Levet Radioactive waste riogram Committee, 1994), p1350-1357.

Site Characterization Plan Thermal Goals Reevaluation, Steven F. Saterlie and J. C. de la Garza, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p882-889.

Soil-Cover Success, Issa S. Oweis, George Dakes, Thomas Marturano and Richard Wierer, CE Oct. 94, p58-59.

Standards and Regulations for Geologic Disposal of High Level Waste: An Issues Framework, S. S. Sareen, S. J. Brocoum and T. A. Cotton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1393-1396.

Storage Tanks: Going Above Ground, Thomas C. Wilson,

CE Mar. 94, p59-61.

Sustainable Development Issues: Industry, Environment, Regulation and Competition, George L. De Feis, El Apr. 94, p177-182.

Treatment of Uncertainty in the NRC Regulatory Process, J. Michael McGarry, III and F. Stanley Echols, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1404-1416

U. S. NRC Staff Views on the Technical Bases for Yucca Mountain Standards, Margaret V. Federline, Janet P. Ko-tra and James R. Firth, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p1422-1428. U.S. Drinking-Water Regulations: Treatment Technologies and Cost, Benjamin W. Lykins, Jr. and Robert M. Clark, EE July/Aug. 94, p783-802.

Water Chemistry of Lead Corrosion Control, Leland L. Harms, Jonathan A. Clement and Michael R. Schock, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p34-

A Wetland Mitigation Bank - An Economic Model, Douglas L. Lashley, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed.,

1994), p352-359.

Wetland Mitigation Banks — A Win-Win Situation, Robert D. Sokolove and P. Robert Thompson, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p342-351.

World's Largest Floating Casino is Firmly Secured, CE

Oct. 94, p19-20.

Rehabilitation

Aftershocks: The Legacy of Loma Prieta, John Prendergast, CE Jan. 94, p46-49.

Airport Reconstruction/Rehabilitation: A Case Study. Steven B. Cornell, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p516-

Analysis and Computation of Old Truss Bridges, Beile Yin, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p32-47.

The Bladensbug Marina Revitalization Project, Wesley R. Johnson and Kevin H. Deis, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p439-448.

Boating Needs Assessments (BNA) for Evaluating Boat Ramp and Facilities Needs, Jon Guerry Taylor and James Paul Posda. (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p20-28.

Boston's Commuter Comeback, Lawrence A. Williamson, CE Jan. 94, p66-69.

Bridge Gets Analysis, Less Likely to Crack, CE July 94,

Property of the Property of the National Strains of the National W. Finch, Jr., Michael J. Chajes, Dennis R. Mertz, Victor N. Kaliakin and Ahmad Faqiri, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1140-1147.

A Chance Constrained Model Using Kinematic Wave Routing for Stormwater Infrastructure Rehabilitation, Timothy L. Jacobs and Miguel A. Medina, Jr., (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p39-54.

Chemical Cleaning Process for Water Pipe Systems, Craig Edstrand, Allen Hieatt and Jerome Ludwig, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H.

Wegener, ed., 1994), p288-295.

Chicago Automates Expressway Lanes, Rita Robison, CE Sept. 94, p52-55.

Chloride Extraction and Re-Alkalization of Reinforced Concrete Stops Steel Corrosion, Emmanuel E. Velivasakis, Sten K. Henriksen and Richard Hauer, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1127-1134.
Connecticut Bridge-Deck is Weekend Wonder, CE Dec.

94, p21,23.

Construction Technologies for Sewer Rehabilitation, Santiago M. Reyna, Jorge A. Vanegas and Abdul H. Khan, CO Sept. 94, p467-487.

CSO Rehabilitation Strategies for Urban Areas, Edward H. Burgess and Larry A. Roesner, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p184-193.

Cured-in-Place Pipe Doesn't Cause a Ripple, CE Feb. 94,

p12,14,16.

The Danby Pipe Renovation System, George McAlpine, (Urban Drainage Rehabilitation Programs and Tech-niques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p144-158.

Distress in Prestressed Concrete Roof Girders at a Cement Plant, W. P. S. Dias, A. D. C. Jayanandana, M. C. M. Fonseka and A. A. D. A. J. Perera, CF Feb. 94, p6-15.

- Dulles International Airport Construction Challenges, Christopher P. Hinker, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p26-29.
- Durability of Composite Material Reinforcement, Michael J. Chajes, Dennis R. Mertz, Theodore A. Thomson, Jr. and Cory A. Farschman, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994),
- Durability of Steel/Composites Bonds for Rehabilitation of Structural Components, Pierre E. Bourban, Steven H. McKnight, Stacy B. Shulley, Vistasp M. Karbhari and John W. Gillespie, Jr., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p295-302.
- Effect of Materials Architecture on Strengthening Efficiency of Composite Wraps for Deteriorating Columns in the North-East, I. Howie and V. M. Karbhari, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p199-206.

Evaluation of Projects for Rehabilitation of Highway Bridges, J. O. Sobanjo, George Stukhart and Ray W. James, ST Jan. 94, p81-99.

Evaluation of Shotcrete Efficiency in Sewers Rehabilitation, Youssef Georges Diab, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p928-935.

Even with Innovative Materials, the Basics Still Matter, James Warner, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p72-79.

Existing Sewer Evaluation and Rehabilitation, Second Edition, Second edition (M&R No. 62), Joint Task Force of the Water Environment Federation and the American Society of Civil Engineers, (B. Jay Schrock, chmn.), 1994, 0-7844-0049-0, 270pp.

Fiber Composite Warp for Rehabilitation of Concrete Structures, Salem S. Faza and Hota V. S. GangaRao, (Infrastructure: New Materials and Methods of Repair,

Kim D. Basham, ed., 1994), p1135-1139.

Flow Capacity of Rehabilitated Sanitary Sewers, Kenneth K. Kienow, Karl E. Kienow and Paul E. Kienow, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p28-42.

FRP Research for Highway Applications in Florida, Rajan Sen and Mohsen Shahawy, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994),

- Fundamental Considerations of Design and Durability in Composite Rehabilitation Schemes for Steel Girders with Web Distress, S. B. Shulley, X. Huang, V. M. Kar-bhari and J. W. Gillespie, Jr., (Infrastructure: New Mate-rials and Methods of Repair, Kim D. Basham, ed., 1994), p1187-1194.
- Future Trends and Needs in Hydraulics, Daryl B. Simons, HY Dec. 92, p1607-1620.
- Getting the Project Started, Daniel G. Hacker, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p1-7.

- Hi-Tech Seismic Rehabilitation of 'Casino De Montreal', Claude Pasquin, Avtar Pall and Rashmi Pall, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1292-1297.
- Historical Considerations for New Jersey Viaduct, Dennis V. Brizick, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p302-307.
- Hurricane Andrew and the Central and Southern Florida Project, James W. Vearil and Christopher T. Smith, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p597-606.

Hybrid Composite Beams: Analytical Modeling, S. A. Bhutta and I. L. Al-Qadi, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p178-190.

Identification of Problems, Solutions, and Cost Savings for Maintenance of Drainageways, Mark R. Hunter, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p194-208.

Illinois Rehabs Rural Highways the Smart Way, CE May

94, p20,22.

- Improvement and Re-establishment of Good Hydraulic Conditions in Sewers: The French Experience, Y. Diab and M. Mommessin, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p329-
- In Rehab We Trust, Benjamin Lavon, CE Sept. 94, p73-74. Induction Heating for Rehabilitation of Steel Structures duction Heating for Renabilitation of Steel Statistics. Using Composites, Pierre E. Bourban, Erdal Karamuk, Roderic C. Don and John W. Gillespie, Jr., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p287-294.

Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994, 0-7844-0063-6, 1252pp.

Innovative Applications of Precast Concrete in Repair of Hydraulic Structures, James E. McDonald, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p963-970.

Integrated System to Develop Highway Rehabilitation Projects, Sarosh I. Khan, Stephen G. Ritchie and Karl

Kampe, TE Jan./Feb. 94, p1-20.

Interceptor Inspection and Rehabilitation Program, William A. Macaitis and Amreek Paintal, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p123-142.

Investments in the Future, James Denning, CE July 94, p40-43.

Jacket Arrest Cracking of Prison Bridge Piles, CE Dec. 94,

Local Sewer Rehabilitation - Metro Chicago, William A. Macaitis and Robert Kuhl, (Urban Drainage Rehabilita-tion Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p111-122.

Locking Into Success, Brian H. Greene, Andrew Schaffer, Donald A. Bruce and John A. Gerlach, CE Apr. 94,

p48-50.

- Maintenance Management Systems for Urban Drainage, Neil S. Grigg, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p2-10.
- Microsurfacing Urban Pavements, David K. Hein, John J. Emery and Romualdo D'Ippolito, CE May 94, p55-57.
- Modeling Impact of Armour Blocks, M. A. G. Silva, (Reconstruction of the West Breakwater at Port Sines, Por-tugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p187-204.

Molhe Oeste Do Porto De Sines Reabilitação Definitiva Fiscalização Da Construção, Joaquim da Silva Pinto, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p229-264.

Multi-Attribute Rehabilitation of Storm or Combined Sewer Systems, Santiago M. Reyna, Jacques W. Delleur and Jorge A. Vanegas, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994),

New Problems in Ground & Water Lease Administration, Allan D. Kotin and Faith F. Backus, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p154-161.

No-Dig Method Contains Rehab Costs, CE Nov. 94, p86. Optimal Rehabilitation Model for Water-Distribution Systems, Joong Hoon Kim and Larry W. Mays, WR Sept./ Oct. 94, p674-692.

Pavement Renovation with HPI Electrochemical Method, Roland S. Jary, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p643-

653.

Planning Model for Sewer System Rehabilitation, Edward H. Burgess, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p30-38.

Planning, Assessing and Implementing Diagnostic Rehabilitation Options, B. Jay Schrock, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p101-110.

Poland Gets Moving, Jeff Austin, WP Special issue 94,

p35-38.

Port of Sines West Breakwater Rehabilitation Repair Works (1990 - 1992), Carlo Alberto Segarelli, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p205-228.

Port of Sines West Breakwater Rehabilitation Strategy Se-lected, Manuel Dinis C. Dias, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p25-34.

Preserve and Protect, Loring A. Wyllie, Jr., CE Feb. 94,

p48-51.

Proposed Rehabilitation of Storrow Drive Interchange Tunnel, Frank J. Heger, Atis A. Liepins and Paul L. Kelley, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1111-1118. Quarter Mile Long Machine Assists Rail Rehab, CE Apr.

94, p107.

RCC For Seismic Design, Noel C. Wong, Michael P. Forrest, Sr. and Sze-Hang Lo, CE Sept. 94, p60-62.

Rehabbing Bridges Under Traffic, Rita Robison, CE Apr. 94, p44-47.

Rehabbing for Remediation, David Banton and Robert Anderson, CE Mar. 94, p64-65.

Rehabilitation of Belle Isle Siphon in Boston, Massachu-setts, Emile Hamwey and Lisa Harris, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p247-256.

Rehabilitation of Brick-Lined Railroad Tunnels to Achieve Increased Clearance, Bernard H. Voor, III, James Wm. Martin and Willie Benton, III, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed.,

1994), p781-787.

Reliability-Based Assessment of Corps Structures, Mary Ann Leggett, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p73-81.

Remote Sensing Pipeline Rehabilitation Methodologies Based Upon the Utilization of Infrared Thermography, Gary J. Weil, Richard J. Graf and Leann M. Forister, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p173-181.

Restoration of Lakes and Canals in an Urban Park - Belle Isle, Michigan, Catherine Riseng, Douglas Denison and Bernard Fekete, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed.,

1994), p261-270.

Risk Simulation Model for Rehabilitation Studies, Richard Males, David Moser, Michael Walsh, Walter Grayman and Craig Strus, (Risk-Based Decision Making in Water Resources VI. Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p274-279.

Robotic Rehabilitation of Sewer Infrastructure, R. Laurence Day, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994),

Round Rock Dam, Outlet Works Modification, Bruce D. Feinberg, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p411-423.

Seismic Upgrades Using Energy Dissipation Devices, David Bleiman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1274-1279.

Service Lateral Reconstruction in the Isle of Man, Jeff Wells, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p257-264.

Serviceability of Earth Retaining Structures, Geotechnical Special Publication No. 42, Richard J. Finno, ed., 1994, 0-7844-0051-2, 160pp.

Sewerage Failure, Diagnosis and Rehabilitation, J. W. Delleur, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p11-28.

Sewerage Rehabilitation Verified Simulation Modeling, Phil Wildbore, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p73-83.

Sewers and Computers, Rodolfo B. Fernandez and Brian W. Daniels, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p836-842.

Sines West Breakwater Emergency Repair, Hydraulic Studies, H. Ligteringen, J. W. van der Meer and M. Rita, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p99-123.

Structural Characteristics of the Danby Pipe Renovation System, Shuaib Ahmad and George McAlpine, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p239-246.

Technologies for Planning Railroad Track Maintenance and Renewal, Donald Uzarski and Sue McNeil, TE Sept./Oct. 94, p807-820.

Trenchless Sewer System Reconstruction Techniques, Lynn E. Osborn, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilita-tion Programs and Techniques, ASCE, 1994), p159-172.

Two States make First Use of Bridge-Deck Technology, CE Apr. 94, p10.

Upgrading Dubai's Sewers, Henry R. Derr and Bruce W. Jones, CE Aug. 94, p60-63.

Urban Drainage Rehabilitation Programs and Techniques, Edited by William A. Macaitis, Task Committee on Urban Water Infrastructure Failure Diagnostics and Reorban water intrastructure Failure Diagnosius and Nomedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994, 0-7844-0038-5, 223pp. The Use of Type K Expansive Cement Concrete for New Construction and Rehabilitation of Concrete Bridge Decks, Kenneth A. Herr and Robert T. Barclay, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p955-962.

Viaduct Re-Created in its Own Image, CE Feb. 94, p20-21. Water Stop Aids Hudson Rehab, CE June 94, p91.

West Breakwater of the Port of Sines Final Rehabilitation Inspection of the Construction, Joaquim da Silva Pinto, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p265-301.

West Breakwater Rehabilitation and Construction Supervision, Fernando A. S. Oliveira and H. de Jong, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway Port, Coastal, and Ocean Division of ASCE, 1994), p327-407.

West Breakwater Sines Definitive Rehabilitation, General Concept, H. Ligteringen, F. Silveira Ramos, J. W. van der Meer and M. Rita, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p168-186.

Yellowman Siphon Rehabilitation, Scott A. Stevens, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas

H. Wegener, ed., 1994), p82-88.

Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994, 0-7844-0034-2,

Analysis of Glulam-FRP Beams by a Layer-Wise Formula-tion, Julio F. Davalos, Youngchan Kim and Somnath S. Sonti, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p67-75.

Behavior of Reinforced High-Strength-Concrete Corbels, Yook-Kong Yong and P. Balaguru, ST Apr. 94, p1182-

1201

Bond Strength of Welded Wire Fabric in Concrete Bridge Decks, Bilal M. Ayyub, Naji Al-Mutairi and Peter Chang, ST Aug. 94, p2520-2531.

Collapse of Geogrid-Reinforced Retaining Structure, Gerald A. Leonards, J. David Frost and Jonathan D. Bray,

CF Nov. 94, p274-292.

Design of Low Rise Dome for the University of Hawaii at Manoa, Alfonso Lopez and Gerald, Orrison, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p393-400.

Generating Reinforcement in FE Modeling of Concrete Structures, Fariborz Barzegar and Srinivas Maddipudi, ST May 94, p1656-1662.

In Rehab We Trust, Benjamin Lavon, CE Sept. 94, p73-74. Middle Eastern Concrete Deterioration: Unusual Case History, Jerome P. O'Connor, CF Aug. 94, p201-212

Performance of Anisotropic Geosynthetic-Reinforced Cohesive Soil Mass, Hoe I. Ling and Fumio Tatsuoka, GT July 94, p1166-1184.

Predicted Behavior of Two Centrifugal Model Soil Walls, See Keung Ho and R. Kerry Rowe, GT Oct. 94, p1845-

Seismic Behavior of Plain- and Reinforced-Masonry Buildings, Miha Tomaževič and Polona Weiss, ST Feb. 94, p323-338.

Seismic Response of Full-Scale Five-Story Reinforced-Masonry Building, F. Seible, M. J. N. Priestley, G. R. Kingsley and A. G. Kürkchübasche, ST Mar. 94, p925-946

Simulated Seismic-Load Tests on Full-Scale Five-Story Masonry Building, F. Seible, G. A. Hegemier, A. Igarashi and G. R. Kingsley, ST Mar. 94, p903-924.

Size Effect in Fiber or Bar Pullout with Interface Softening Slip, Zdeněk P. Bažant and Rodrigue Desmorat, EM Sept. 94, p1945-1962.

Seplicing Strength of Welded Steel Mesh in Concrete Bridge Decks, Bilal M. Ayyub, Naji Al-Mutairi and Peter Chang, ST Aug. 94, p2532-2546.

Strength-Ratio Based Assessment of Wood Structures, Jozsef Bodig and Loren D. Flick, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p677-684.

Structural Behavior of Polymer Concrete Beams Using Recycled Plastic, Karim S. Rebeiz, Sleiman P. Serhal and David W. Fowler, MT Feb. 94, p150-165.

Surface Settlement Due to Shear Stresses at Depth, Madhira R. Madhav and N. Kumar Pitchumani, GT July 94, p1205-1210.

Unified Code Provisions for Concrete Bridges, Antoine E. Naaman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p555-560.

Welded Wire Fabric for Bridges II.: Fatigue Strength, Bilal M. Ayyub, Peter C. Chang and Naji A. Al-Mutairi, ST June 94, p1882-1892.

Welded Wire Fabric for Bridges. I: Ultimate Strength and Ductility, Bilal M. Ayyub, Peter C. Chang and Naji A. Al-Mutairi, ST June 94, p1866-1881.

Wood Fiber Reinforced Cement Composites Under Wetting-Drying and Freezing-Thawing Cycles, Parviz Soroushian, Shashidhara Marikunte and Jong-Pil Won, MT Nov. 94, p595-611.

Working Stress Design Method for Reinforced Soil Walls, Mauricio Ehrlich and James K. Mitchell, GT Apr. 94,

p625-645.

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Reinforcing steels

CERF Showcases Research Payoff, CE Jan. 94, p18-19.

Corrosion Resistant Epoxy-Coated Reinforcing Steel, Robert G. Mathey and James R. Clifton, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p109-115.

Design of Lateral Steel in Columns, Shamim A. Sheikh and Murat Saatcioglu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p432-437

Discrete Modeling of Soil-Structure Interaction Under Dynamic Loading, Grzegorz Bak, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p873-876

Low-Cycle Fatigue Behavior of Reinforcing Steel, J. B. Mander, F. D. Panthaki and A. Kasalanati, MT Nov. 94, p453-468.

Macrocell Corrosion of Bent Epoxy-Coated Bars, Khaled Kahhaleh, James Jirsa, Ramon Carrasquillo and Harovel Wheat, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p8-15.

Rational Limits for Longitudinal Steel in Concrete Columns, ASCE-ACI Committee 441-Concrete Columns, Subcommittee on Longitudinal Reinforcement Limits, (Furlong, Richard W., chmn.), (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p438-443

Real-Time Control for a Robotic Rebar Bender, Phillip S. Dunston and Leonhard E. Bernold, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p392-400.

Rebar Corrosion and Sulfate Resistance of Blast-Furnace Slag Cement, A. S. Al-Gahtani, Rasheeduzzafar and S. S. Al-Saadoun, MT May 94, p223-239.

Recent Advances in 3D Non-Linear FE-Analysis of R/C and P/C Beam Structures, Franz-Josef Ulm, Jean-Luc Clément and Johann Guggenberger, (Structures Con-gress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1427-1432.

Shear Design Guidelines for Polyester Concrete Using Re-cycled Plastic, K. S. Rebeiz, S. P. Serhal and D. W. Fowler, (Structures Congress XII), N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p821-826.

Variables Affecting Cyclic Behavior of Reinforcing Steel, J. I. Restrepo-Posada, L. L. Dodd, R. Park and N. Cooke, ST Nov. 94, p3178-3196.

Relative density

Estimating Sediment Relative Density Using an Impact Core Sampler and Wave Equation-based Pile Analysis,
James M. Schmidt and Donald E. Bruggers, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1212-1219.

Setup and Relaxation in Glacial Sand, Donald L. York, Walter G. Brusey, Frank M. Clemente and Stephen K.

Law, GT Sept. 94, p1498-1513.

Vibratory Mobilization of Immiscible Liquid Ganglia in Sands, Lakshmi N. Reddi and Sreedhar Challa, EE Sept./Oct. 94, p1170-1190.

Relaxation, mechanics

Setup and Relaxation in Glacial Sand, Donald L. York, Walter G. Brusey, Frank M. Clemente and Stephen K. Law, GT Sept. 94, p1498-1513.

Reliability

Alternative Approaches to Reliability Modeling of a Multi-ple Engineered Barrier System, Malwane M. A. Ananda and Ashok K. Singh, (High Level Radioactive Waste Program Management, High Level Radioactive Waste Program Committee, 1994), p1030-1036.

Application of Nondestructive Evaluation to Wood Poles, Ronald W. Anthony and Jozsef Bodig, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham,

ed., 1994), p669-676.

ARIANE-5 Launch Operations Construction and Operation of a New Launch Complex for Lower Cost, Higher Reliability Missions, Juan de Dalmau, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1521-

Assessment and Upgrade of an Older Transmission Line, Robert O. Kluge and Alain H. Peyrot, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p607-612.

AWS versus AIJ Tubular K-Connection Design Rules, Yoshiaki Kurobane and Kenshi Ochi, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p190-

Calibration of Current Factors in LRFD for Steel, David V. Rosowsky, Ahmed F. Hassan and N. V. V. Phani Kumar, ST Sept. 94, p2737-2746.

A comparison between computed and measured bed evolu-tion in a river bend, L. Montefusco and A. Valiani, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994),

Comparison of Two different Models of a Shell Roof, Oscar A. Andrés, Néstor F. Ortega and Carlos A. Schiratti, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penal-

ba, ed., 1994), p320-329.

Designing Optimal Reliable Multiquality Water Supply Systems, Avi Ostfeld and Uri Shamir, (Water Policy and Management: Solving the Problems, Darrell G. Fontane,

ed. and Harry N. Tuvel, ed., 1994), p270-274. Drivetrain Design, Incorporating Redundancy, for an Autonomous Walking Robot, Gerald P. Roston and Kevin Dowling, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p184-192

Evaluation of Cast Iron Columns for Safety and Reliabili-Tamaro, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1544-1549.

Evolutionary Fourier Analysis of Wave Data, Leon E. Borgman, Mihail Petrakos and Chao Li, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and

J. Michael Hemsley, ed., 1994), p708-725.

Explicit Stochastic Modelling of a Reservoir for Hydro-power Production, Slobodan P. Simonovic and Rangarajan Srinivasan, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p368-371.

Fatigue-Reliability Evaluation of Steel Bridges, Zhengwei Zhao, Achintya Haldar and Florence L. Breen, Jr., ST May 94, p1608-1623.

Fatigue-Reliability Updating Through Inspections of Steel Bridges, Zhengwei Zhao, Achinyta Haldar and Florence L. Breen, Jr., ST May 94, p1624-1642.

FRP Box-Beams Under Long-Time Static and Fatigue Loading, Urs Meier, (Structures Congress XII. N. C.

Loading, Urs Meier, (Structures Congress AII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p411-416.
Harmonization of Reliability-Based Timber Engineering Codes and Standards, Ronald W. Anthony and Jozsef Bodig, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p503-507.

The Hazard In Using Probabilistic Seismic Hazard Analysis, Ellis L. Krinitzsky, CE Nov. 93, p60-61.

Integration of Reliability, Uncertainty and Optimization in Hydraulics Systems: Classification of Problem Types, Kevin E. Lansey, (Water Policy and Management: Solving the Research of Problem Types, Revin E. Lansey, (Water Policy and Management: Solving the Research of Policy and Management: Solving the Re ing the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p262-265.

Integration of Reliability, Uncertainty and Optimization in Hydraulics Systems: Structural Reliability, Kevin E. Lansey, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel,

Intermediate Support Cable Logging Systems, James W. Charland, Alan G. Hernried and Marvin R. Pyles, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994),

pryst-800.
Inverse Reliability Problem, Armen Der Kiureghian, Yan Zhang and Chun-Ching Li, EM May 94, p1154-1159.
Life Prediction of Materials/Systems of Transportation Infrastructure, K. P. George, (Infrastructure: New Materials and Mathed of Report Vim D. Bashop et al. 1904). als and Methods of Repair, Kim D. Basham, ed., 1994), p1081-1088.

Load and Resistance Factors for Bridge Design Code, Andrzej S. Nowak, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p538-543.

Macroelement Model for Shear Wall Analysis, Jerome M. James and Sashi K. Kunnath, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1505-1512.

Meeting 503 Regulations for Ten Biosolids Incinerators (And Associated Stories), Mark Prentice, Norman LeBlanc, Thomas E. Sadick and F. Michael Lewis, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p114-121.

Moment-Curvature Relationships for Dented Tubular Sections, L. Duan, J. T. Loh and W. F. Chen, ST Mar. 93,

p809-830.

Nonlinear Stochastic Response and Reliability of Secon-dary Systems, C. D. Huang, W. Q. Zhu and T. T. Soong,

EM Jan. 94, p177-196.

Onboard Image Processing With Transputers, András Balázs, József Biró and Sándor Szalai, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1323-1332.

Optimization for Earthquake Loads, Kevin Z. Truman and Franklin Y. Cheng, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p123-132.
Predicting Pipe Failure Effects in Water Distribution Networks, P. W. Jowitt and Chengchao Xu, WR Jan./Feb.

93, p18-31.

Predicting Strength Variability of Concrete Offshore Structures, Perry Adebar, Ricardo Foschi and Felix Yao, ST July 94, p2108-2122

Probabilistic Design of Open Drainage Channels, Said M.

Easa, IR Nov./Dec. 92, p868-881.

Quality Control with Reliability for Large GPS Networks, Alfred Leick and Michael B. Emmons, SU Feb. 94,

p.25-41.
Reliability and Validity of Modeling Sedimentation and Debris Flow Hazards Over Initially Dry Areas, Douglas L. Hamilton, Robert C. MacArthur and Vito A. Vanoni, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p.342-356.

Reliability of Light-Gage Metal Joist Hangers, Francis O. Berkoh and Juan J. Salinas, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p906-

911

Reliability of Short and Slender Reinforced-Concrete Columns, Sonia E. Ruiz and J. Cipriano Aguilar, ST June 94, p1850-1865.

Reliability of Uncertain Nonlinear Trusses Under Random Excitation. II, R.-H. Cherng and Y. K. Wen, EM Apr. 94, p748-757.

Reliability of Uncertain Nonlinear Trusses Under Random Excitation. I, R.-H. Cherng and Y. K. Wen, EM Apr. 94, p733-747.

Reliability of Underground Pipelines Subject to Corrosion, M. Ahammed and R. E. Melchers, TE Nov./Dec. 94, p989-1002.

Reliability-Based Optimum Design for UBC and Nonde-terministic Seismic Spectra, C. C. Chang, J. F. Ger and F. Y. Cheng, ST Jan. 94, p139-160.

Sensitivity Analysis of Reliability-Based Optimal Solution, Ib Enevoldsen, EM Jan. 94, p198-205.

Structural Analysis of Pavements: State-of-the-Art, Yu T. Chou, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p958-963.

Timing Analysis of a Multiprocessor Architecture for Active Control, John W. Baugh, Jr. and Wael M. Elseaidy, (Analysis and Computation, Franklin Y. Cheng, ed., 2021).

1994), p203-212.

Uncertainty in Reservoir Operation Optimisation, Kevin S. Tickle and Ian C. Goulter, (Water Policy and Manage-ment: Solving the Problems, Darrell G. Fontane, ed. and

Harry N. Tuvel, ed., 1994), p363-367. Using a Small Satellite Bus As a Dedicated Platform for On-Orbit CSI Experiments, Andrew S. Bicos and Gregory G. Loboda, (Engineering, Construction, and Opera-tions in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p37-46.

Variability Response Functions of Stochastic Plane Stress/ Strain Problems, Friedrich J. Wall and George Deodatis,

EM Sept. 94, p1963-1982.

Volterra Models of Ocean Structures: Extreme and Fatigue Reliability, S. R. Winterstein, T. C. Ude and T. Marthin-

sen, EM June 94, p1369-1385.

WATSUP: A Simulation Model for Water Supply Cost and Reliability, Mark R. Jensen and Jay R. Lund, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p806-

Willingness-to-Pay for Alternative Shortage Probability Distributions, Jay R. Lund, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p521-524.

Reliability analysis

Assessing the Reliability of Low Pressure Membrane Systems for Microbial Removal, Samer S. Adham and Joseph G. Jacangelo, (Critical Issues in Water and Waste-Septi G. Jacangeto, (Critical Issues in Water and Waste-water Treatment, Joseph N. Ryan, ed. and Mare Ed-wards, ed., 1994), p313-319. Creep Analysis of Composite Steel-Concrete Members with Deformable Connectors, F. Mola, (Structures Con-gress XII), N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p737-742.

Mechanistic Model for Transition Probabilities, K. H. Chua and C. L. Monismith, TE Jan./Feb. 94, p144-159.

Methods for Risk and Reliability Analysis, Larry W. Mays, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p26-44.

Model-Correction-Factor Method in Structural Reliability, Ove Ditlevsen and Torben Arnbjerg-Nielsen, EM Jan.

94, p1-10.

Monte Carlo Simulation for Correlated Variables with Marginal Distributions, Che-Hao Chang, Yeou-Koung Tung and Jinn-Chuang Yang, HY Mar. 94, p313-331.

Orthogonal Series Expansions of Random Fields in Relia bility Analysis, Jun Zhang and Bruce Ellingwood, EM Dec. 94, p2660-2677.

Performance of Integrated Municipal Water System During Drought, Radwan A. Al-Mubarak Al-Weshah and Douglas T. Shaw, WR July/Aug. 94, p531-545.

Prediction of Settlements of Footings on Sands: Accuracy and Reliability, Riccardo Berardi and Renato Lancellotta, (Vertical ard Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p640-651.

Reliability Analysis of a Multi-Reservoir Water Distribution System, Shu-li Yang, Nien-Sheng Hsu, Peter W. F. Louie and William W-G. Yeh, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed.

and Harry N. Tuvel, ed., 1994), p855-858.
Reliability Analysis of Creep and Shrinkage Effects, C. Q.
Li and R. E. Melchers, ST Sept. 92, p2323-2337.

Reliability Analysis of Open Drainage Channels under Multiple Failure Modes, Said M. Easa, IR Nov/Dec. 94, p1007-1024.

Reliability Analysis of Stiffened Panels, E. Nikolaidis, O. Hughes, B. M. Ayyub and G. J. White, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1466-1471

Reliability Analysis of Water Distribution Systems, Rafael G. Quimpo, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p45-55.

Reliability Analysis of Water-Distribution Systems, Rajesh Gupta and Pramod R. Bhave, EE Mar./Apr. 94, p447-

460.

Reliability Applied to Slope Stability Analysis, John T. Christian, Charles C. Ladd and Gregory B. Baecher, GT Dec. 94, p2180-2207.

Reliability Assessment of Continuously Reinforced Concrete Pavements, Angela J. Weissmann, B. Frank McCullough and W. Ronald Hudson, TE Mar./Apr. 94, p178-192

Reliability Assessment of Prestressed Concrete Beams, Ali S. Al-Harthy and Dan M. Frangopol, ST Jan. 94, p180-

A Reliability Model for Fatigue and Corrosion of Hydraulic Steel Structures, Joseph Padula, Cameron Chasten, Paul Mlakar and Reed Mosher, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1217-1224.

Reliability of Flood Warning Systems, Roman Krzyszto-fowicz, Karen S. Kelly and Dou Long, WR Nov/Dec.

94, p906-926.

Reliability-Based Assessment of Corps Structures, Mary Ann Leggett, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p73-81.

Reliability-Based Design of Prestressed Concrete Beams, Ali S. Al-Harthy and Dan M. Frangopol, ST Nov. 94,

p3156-3177

Risk and Reliability of Water Resources Infrastructure and Engineering Approaches to Risk and Reliability Analysis, Richard Males, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p338-339. Risk Management Strategies for Natural, Manmade, and

Technological Hazards, Steven R. Cone, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p342-344.

Specification Needs for FRP Composite Products, Craig A. Ballinger, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p56-63.

Remedial action

Beneficial Uses of Dredged Material on the Upper Great Lakes, Douglas J. Zande and M. Pamela Horner, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p654-663.

Building A Barrier Wall Through Boulders, Donald R. McMahon, Michael J. Mann and Robert C. Tulett, CE Oct. 94, p60-62.

Cleanup of a Coal Tar Deposit Using a Vacuum Clam, B. G. Bennett, I. K. Hill and A. Z. Erzinclioglu, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p991-1000. Computer-Aided Cleanup, Jim Williams and Barney Jones,

CE Oct. 94, p46-49.

Constructing Around Contamination, Edward A. Wood, Jill R. Crosbie and Richard A. Brown, CE Oct. 94, p50-

Delineating Limits of Remediation for Heavy Metal Con-

taminated Sediments in River and Cove Areas, Gregory P. Matthews and Thomas M. Simmons, (Dredging E. Clark McNair, Jr., ed., 1994), p1240-1249.

Design of Dredge Containment and Dewatering Facilities, John M. Logigian, Edward A. Dudek, Jr. and Michael R. Palermo, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1230-1239.

Development of an Excavation Plan for Heavy Metal Contaminated Marsh Deposits, John J. Nocera and Thomas M. Simmons, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1220-1229.

Dissolution of TCE and TCA Pools in Saturated Subsurface Systems, Albert E. Pearce, Evangelos A. Voudrias and Michael P. Whelan, EE Sept./Oct. 94, p1191-1206. Eagle Harbor Superfund Project, Eric E. Nelson, Amy L. Venderheiden and A. David Schuldt, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1122-1131.

Environmental Restoration and Enhancement using Dredged Material in Chesapeake Bay, Maryland, S. D. Garbarino, R. N. Blama, M. C. Landin, S. R. Maynord and T. R. Patin, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p384-393

Evaluation of Remedial Options for the Sitcum Waterway Sediments: A Case Study, John R. Verduin, III, Garry E. Horvitz and Richard C. Gilmur, (*Dredging '94*, E. Clark

McNair, Jr., ed., 1994), p555-566.

A Framework for the Environmental Risk Assessment of Contaminated Sediments, Tom M. Dillon, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p141-149.

In Situ Sediment Treatment of Dofasco Boatslip, Hamilton Harbour, Tom Murphy, Henry Brouwer and Jay Baoin, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1071-1080

In-Situ Treatment of Hazardous Sediment, Lyman Wible, Stacy McAnulty, Robert Stanforth, Ajit Chowdhury and Mick Warner, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p468-473.

Integrated Environmental Monitoring Dredging Projects in the Netherlands, Thomas Arts and Andre Kok, (*Dredg-ing '94*, E. Clark McNair, Jr., ed., 1994), p1370-1379.

Laboratory and Field Demonstrations of Sediment Treatment Technologies by the USEPA's Assessment and Remediation of Contaminated Sediments (ARCS) Program, Stephen Garbaciak, Jr., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p567-578.

LADS System, Inc. Thermal Remediation Treatment for Contaminated Sediment, Vladimir Shepsis, Nancy L. Case and Gregory L. Hartman, (*Dredging '94*, E. Člark McNair, Jr., ed., 1994), p66-75.

Marathon Battery Superfund Project - A Review of Design, Construction and Lessons Learned, Michael P. Taylor, Pamela N. Tames and Alan R. Elia, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1210-1219.

New Applications and Practices for Beneficial Uses of Dredged Material, M. C. Landin, J. Fowler and H. H. Allen, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p526-536.

Nutrient Retention Time in High-Permeability, Oil-Fouled Beach, William R. Wise, Oktay Güven, Fred J. Molz and Steve C. McCutcheon, EE Nov./Dec. 94, p1361-1379.

Pilot-Scale Demonstration of Sediment Washing, Jim E. Galloway and Frank L. Snitz, (Dredging '94, E. Clark

McNair, Jr., ed., 1994), p981-990.

Pilot-Scale Demonstrations of Thermal Desorption for the Treatment of Contaminated River Sediment, B. Thomas Kenna, David Conboy, Judith Leithner, Daniel Averett and Stephen Yaksich, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p474-483.

Placement Techniques for Capping Contaminated Sediments, Michael R. Palermo, (Dredging '94, E. Clark

McNair, Jr., ed., 1994), p1111-1121.

Preparation of Bid Documents for Dredging/Excavating Contaminated Sediments, Soils and Marsh Deposits at the Marathon Battery Superfund Site Cold Spring, NY, Thomas M. Simmons, Gregory P. Matthews and Nick Multari, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1201-1209.

Pretreatment of Secondary Effluent for Drip Irrigation, Massoud A. Tajrishy, David J. Hills and George Tchobanoglous, IR July/Aug. 94, p716-731.

Quality Assurance for Hazardous-Waste Projects, N. S. Shashidhara, CE Dec. 94, p66-68.

Radio Remediation, ET Apr./May 94, p11.

Recent Assessment and Decontamination Studies of Contaminated Sediments in the New York/New Jersey Harbor, Eric Stern, Joseph Olha, Audrey A. Massa and Bryce Wisemiller, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p458-467.

Removal Of Chromium From Groundwater Using Permea ble Barriers: An Aquifer Simulation Study, Mark D. Schmidt and Stephen P. Shelton, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p792-804. Restoring and Protecting Marine Habitat, Thomas A. Sands and Wayne Young, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p368-377.

Sediment Remediation: An International Review, Daniel E. Averett and Norman R. Francingues, Jr., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p596-605.

Spoils of War, Richard S. Skryness, Karl Swenson and Williams Pananos, CE Nov. 94, p51-53.

Superfund Decision Analysis in Presence of Uncertainty, Aaron A. Jennings, Neel Mehta and Sumeet Mohan, EE Sept./Oct. 94, p1132-1150.

Turbidity and Contaminant Release During Dredging of Contaminated Sediments, Ronald W. van Oostrum and Peter Vroege, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p210-219.

Underwater Cleanup of a Pool of Liquid Creosote, B. G. Bennett and I. K. Hill, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p961-970.

Vibratory Extraction of Clay Fines from Subsurface, Lakshmi N. Reddi, A. Hadim, R. N. Prabhushankar and F. Shah, EE Nov./Dec. 94, p1544-1558.

Vibratory Mobilization of Immiscible Liquid Ganglia in Sands, Lakshmi N. Reddi and Sreedhar Challa, EE

Sept./Oct. 94, p1170-1190.

So You Want to Remediate Contaminated Mud! These are Your Five Choices.", Louis J. Thibodeaux, Danny D. Reible and Kalliat T. Valsaraj, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p588-595.

Remote control

Automated Post Irradiation Handling of Spent Nuclear Fuel In PNC's FMF-2 Facility Test Hot Cell, Mark H. Price and Thomas R. Frantz, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p358-362.

Autonomous Navigation for Structured Exterior Environments, J. Bryan Pletta, (Robotics for Challenging Envi-ronments, Laura A. Demsetz, ed. and Paul R. Klarer, ed.,

1994), p79-87.

Bubba, A Teleoperated Countermine Vehicle, Dave Hayward, Bryan Pletta, Jerry Clifford and Kerry Habiger, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p464-473.

Computer-Assisted Coal Mining — An Overview, George H. Schnakenberg, Jr., (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed.,

1994), p427-436.

Early Detection of Rock Movement with Time Domain Reflectometry, Charles H. Dowding and Fei-Chiu

Huang, GT Aug. 94, p1413-1427.

The Engineer Vehicle Tele-operation Capability, David J. Busse and Joseph R. Urda, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p474-480.

Goals and Requirements for Scientific Lunar Rovers, Charles Meyer, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed. and Paul R. Klarer, ed.,

1994), p166-174.

A Mobile System for the Remote Assembly of Planetary Structures, P. T. Boissiere, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p278-285.

Onika: A Multilevel Human-Machine Interface for Real-Time Sensor-Based Systems, Matthew W. Gertz and Pra-deep K. Khosla, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p28-36.

An Overview of the Accident Response Mobile Manipulation System (ARMMS), W. D. Morse, D. R. Hayward, D. P. Jones and A. Sanchez, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p304-310.

Recent Developments in the Robotic All Terrain Lunar Exploration Rover (RATLER) Program, P. R. Klarer, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p202-209.

The Role of Computer Graphics in Teleoperation, Antal K. Bejczy, Won-Soo Kim and Paul S. Schenker, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p1-9. A Surface Exploration Vehicle Testbed for Real-Time Control Exerimentation, Songjae Lee, R. Michael Brown, Ta-Yu Yuan, Chih-Kang Chao, Dhaval Patel, Gordon K. Lee and Robert B. Kelley, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1333-1344

Remote sensing

Acoustic-Doppler Velocimeter (ADV) for Laboratory Use, Atle Lohrmann, Ramon Cabrera and Nicholas C. Kraus, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p351-365.

Application of a Geographic Information System to Evaluate Environmental Hazards, Mary J. S. Roth, Deborah L. Shaffer and Roger Ruggles, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p265-272.

Geographical Information Systems and Remote Sensing: a ographical Information Systems and Reinkoe Sensing, a possible support in 2D modelling of flood propagation, F. F. Amighetti, P. P. Congiatu, A. Di Filippo and P. Molinaro, (Modelling of Flood Propagation Over Ini-tially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p143-155.

Global-Climate Change?, ET Aug/Sept. 94, p11. Glossary of Mapping Science, ISBN: 1-57083-011-8, Joint Committee of the American Society of Civil Engineers, American Congress on Surveying and Mapping, and American Society for Photogrammetry and Remote Sensing, 1994, 0-7844-0050-4, 581pp.

Impervious Cover Extraction Using Remote Sensing/GIS, Stuart B. Murchison, John M. Hunt and Steven C. (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

Darrell G. Porlance, ed. and Harry S. Land Hearty p. 127-131.

NASA's Mission to Planet Earth: Will Civil Engineering Reap Benefits? John H. McElroy, El Oct. 94, p401-404.

Observations of Wind Wave Growth by ERS-1 SAR, Chich Y. Peng and Antony K. Liu, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Marchand (2004), p. 2024. doi: 10.1146/j. 10.1146.

chael Hemsley, ed., 1994), p934-942.

Optical Remote Sensing of Wave Surface Kinematics, Stephen Riedl, Richard Seymour and Jun Zhang, (Ocean Wave Measurement and Analysis, Orville T.

ed. and J. Michael Hemsely, ed., 1994), p943-994.

Remote Infrared System for Scanning Hazardous Waste
Tanks, Kim L. H. Morris, (High Level Radioactive Waste
Management, High Level Radioactive Waste Program

Committee, 1994), p1104-1109.

A Remote Sensing Evaluation of Lunar Pyroclastic Deposits, B. Ray Hawke and Cassandra R. Coombs, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994),

p1008-1019.

Remote Sensing Pipeline Rehabilitation Methodologies Based Upon the Utilization of Infrared Thermography, Gary J. Weil, Richard J. Graf and Leann M. Forister, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs sand Techniques, ASCE, 1994), p173-181.
Satellite Observations of Wave Heights in Arabian Sea and Bay of Bengal, Usha Natesan and S. P. Subramanian, WW Nov./Dec. 94, p576-579.

"The Potential for the Department of Defense to Use Space-Based Remote Sensing to Support DOD and Other Government Agencies' Environmental Programs" Donald R. Artis, Jr., (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p542-552.

Rendall, Charles R.

Charles A. Parthum Is 1994 Nominee for ASCE President-Elect, NE July 94, p3.

Renewable resources

Engineering Sustainable Development, John Prendergast, CE Oct. 93, p39-42.

Bidding Model for Refurbishment Work, Teo Ho Pin and W. F. Scott, CO June 94, p257-273.

Bridge Designs Look to Future, Remember Past, CE Aug. 94, p12-13.

Brooklyn Battery Tunnel Rehab is Under Way, CE May 94, p28.

Courts Claim Surety is Sure Thing, CE Jan. 94, p27.

Development of the Sheboygan Waterfront Sheboygan,
Wisconsin, Robert Doyle, Fred A. Klancnik and Robert Petersen, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p552-561.

Environmentally Compatible Marinas the Major Issues that Need to be Addressed in Designing New and Retrofitting Existing Marinas, Daniel S. Natchez, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p49-58.

Harbor and Marina Improvements McKinley Marina Mil-waukee, Wisconsin, Greg High and Dave Werren, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p489-498.

Life (and Travel) on the Mississippi Gets Better, CE Aug.

Minipile Construction Keeps the Plant Running, CE May 94, p17.

Nighttime Cement Concrete Pavement Replacement Seattle-Tacoma International Airport, Jo A. Lary and John Rothnie, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p92-101.

Pentagon to Undergo Billion-Dollar Rehab, CE May 94,

Putting a Historic Train Shed Back on Track, CE July 94.

p22-23. Steam Plant Becomes Biotech Lab. Terry Lundeen, Todd Perbix and John Schwartz, CE Sept. 94, p44-47.

Two Case Studies of Marine Parks & Marinas as Economic and Tourism Activity Stimulators in Brazil, Claudio Brasil do Amaral and John C. Corrough, (), p565-576.

Waterfronts: GATEWAY to Your Community, Allyson Forsythe-Fiene, Robert D. Espeseth and Joseph T. O'Leary, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p449-459

With Base Isolation, You Can't Break City Hall, CE Sept. 94, p14.

Repairing

Analysis of Structural Debris Generation and Disposal After Hurricane Andrew: Technical Perspective, Berrin Tansel, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p533-538.

An Artificial Neural Network Approach to Pavement Maintenance Decision Support System, Abdullah M. Alsugair and Essam Sharaf, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p942-949.

Assessing Fitness for Purpose of Offshore Platforms. II:

Risk Management, Maintenance, and Repair, H. Banon, ST Dec. 94, p3613-3633.

Assessment of Building Damage Sustained During Hurri-cane Iniki (Comparison with Hurricane Iwa), Michael K. H. Yee and Arthur N. L. Chiu, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p102-110.

Biaxial Testing of Brittle Repair Material for Rigid Pave ments, George Z. Voyiadjis and Taher M. Abu-Lebdeh, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p964-971.

Loodino, ed., 1994), p964-y17.
Budgeting for Facility Repair and Maintenance, A. L. Barco, ME July/Aug. 94, p28-34.
Carbon and Steel Microfiber-Reinforced Cement-Based Composites for Thin Repairs, Nemkumar Banthia and Sylvie Dubeau, MT Feb. 94, p88-99.
Checking Concrete Growth, Vann A. Newell, David T. Tenero and Cheloles D. Worger, CF. Lee, 94, p. 70, 73

Tanner and Charles D. Wagner, CE Jan. 94, p70-72.

Emergency Repairs for Storrow Drive Tunnel, Paul L. Kelley, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1103-1110.

Engineering of the Building Envelope "To Do Or Not To Do", Norris Stubbs and Dale C. Perry, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994),

Flat-Plate Repairs Using Innovative Shotcrete Applica-tions, Avanti C. Shroff and Indrajit M. Mehta, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p971-982.

Fluid Microconcrete - Properties and Application, M. Decter, D. Diamond, R. W. Lambe and D. Mueller, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p725-734.

Focusing on Fatigue, Peter B. Keating, CE Nov. 94, p54-57.

Grout Repair of Dented Offshore Tubular Bracing— Experimental Behavior, James M. Ricles, Troy E. Gillum and William Lamport, ST July 94, p2086-2107.

Heat-Straightening Repair of Damaged Steel, R. Richard Avent, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1194-1202.

Hydraulic Pipe Reshaper, ET Aug./Sept. 94, p10.

Improvements to Residential Construction on Kauai After Iniki, Ken K. Hayashida and Dennis K. Hanatani, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p617-625.

Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994, 0-7844-0063-6, 1252pp.

Innovative Applications of Precast Concrete in Repair of Hydraulic Structures, James E. McDonald, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p963-970.

Inspection and Repair of a Timber Truss Bridge - An Application of Nondestructive Testing, Norbert J. Volny, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p654-661.

Intelligent Renewal Keeps Infrastructure Civil, CE Mar.

94, p6.

King Harbor Mole Repair Redondo Beach, California, Clark B. Adams, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p283-291.

Monitoring of Structures During Repair of Underground Utilities, F. Dirk Heidbrink and John E. Pearson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p258-263.

New and Innovative Repair Technologies (Soil Stabiliza-tion and Pot-Hole Repair/Prevention), William A. Mallow, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1097-1102.

Poland Gets Moving, Jeff Austin, WP Special issue 94,

Re-Repair of the Piedras Bridge in El Paso, Texas with a New Low Pressure Spray Applied Structural Repair Mortar System, Robert J. Gulyas and Robert Navarro, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p936-954.

Repair of Abrasion/Erosion Damage to Vallecito Dam with Silica Fume Concrete, Stan Mattingly and Glenn Smoak, (Infrastructure: New Materials and Methods of Repair,

Kim D. Basham, ed., 1994), p735-742.

Robotic Rehabilitation of Sewer Infrastructure, R. Laurence Day, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p383-391.

Seismic Response and Retrofitting of Non-Ductile Reinforced Concrete Bridges, James Ricles, Yueh-Shiun Yang and M. J. Nigel Priestley, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1226-1231.

Sines West Breakwater Emergency Repair, Hydraulic Studies, H. Ligteringen, J. W. van der Meer and M. Rita, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p99-123.

Test for Polymer Overlay Interface on Concrete, Brian M. Deming, Haluk Aktan and Mumtaz Usmen, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p709-715.

Thinking Thin for Road Repair, ET Oct./Nov. 94, p6.

To Microtunnel or Not to Microtunnel? The Construction of the Crown Point Trunk Sewer, Karen Larson Henry and Dave Zoumaras, (Hydraulics of Pipelines, Deon Fowles, ed. and Douglas H. Wegener, ed., 1994), p73-

Use of FESWMS-2DH for the Attaway Road Bridge Repair Project, M. A. Ports, D. D. Dee, Jr. and J. Warren, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p579-583.

Repeated loading Optimal Shakedown Design of Circular Plates, F. Giam-banco, L. Palizzolo and C. Polizzotto, EM Dec. 94, p2535-2555.

Resilient Modulus for Fine-Grained Subgrade Soils, Dingqing Li and Ernest T. Selig, GT June 94, p939-957.

Reports

Conservation Group Urges Flood-Control Reform, CE Sept. 94, p18.

Dallas Session Explores What Makes a Civil Engineer into a Leader?, NE Feb. 94, p15.

Engineering Jargon and Civil Liability, Robert W. Day, El Oct. 94, p413-418.

Firm Plugs in to Electronic Time Sheets, ME Nov./Dec. 94,

Hazwaste Spending Boom to Continue, CE Feb. 94, p8. Poor Service Not Poor Design Drives, ME Nov./Dec. 94, p12.

Report Near on Condition of L.A. Metro Tunnel, CE Jan. 94, p22.

Report Recommends 'Tailored' Infrastructure, CE June 94, p22.

Report: Specs Not Met but Los Angeles Metro Tunnel 'Structurally Adequate', CE May 94, p24-25.

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Transit Agencies May Face Shortfall, CE May 94, p8.

Research Affordable Housing Solutions Offered in Pittsburg, CE May 94, p11.

Air Concentration Measurements in Highly-Turbulent Flow on a Steeply-Sloping Chute, James F. Ruff and Kathleen H. Frizell, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p999-1003.

Anaerobic Biodegradation of Chloroform under Methanogenic Conditions, Devesh, Munish Gupta, Makram T. Suidan and Gregory D. Sayles, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p609-616.

Analysis of CE-Related Research Notes Lack of Strategy and Direction, NE Feb. 94, p5.

Bridge Scour Instrumentation, P. F. Lagasse, E. V. Richardson and S. A. Sabol, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p36-40.

Building Code of Australia Expert Assistant - Putting Research into Practice, Ron Sharpe, Stephen Oakes, Philip Haselden and Ian Davidson, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1679-1686.

California Water District Eyes Seismic Retrofits, CE Nov. 94, p19.

CERF Showcases Research Payoff, CE Jan. 94, p18-19. Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Mar-cel, ed. and Nicholas C. Kraus, ed., 1994, 0-7844-0043-1, 983pp.

Coffee, Tea or Clean Water?, CE May 94, p8. Colorful Signs Could Save Lives, CE Nov. 94, p8.

A Cooperative Agreement for Research on Radioactive Waste Management Between the United States Department of Energy and Atomic Energy of Canada Limited, Kenneth W. Dormuth and Robert A. Levich, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2409-2412.

Corps' CPAR Program Enters Sixth Year, CE Mar. 94, p8 Creating Powder-Coatings Guidelines, ET Dec. 94/Jan. 95, p10.

Current and Future Research in Steel Bridge Structures, Karl H. Frank, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1077-1081.

Design, Not Material, Dictates Earthquake Survival (ltr), CE Sept. 94, p36.

DOE Waste Gets Big Chill, ET Oct./Nov. 94, p1,7.

Dredging '94, 2 Vols., E. Clark McNair, Jr., ed., 1994, 0-7844-0010-5, 1580pp.

Educating A Structural Engineer, J. A. Bohinsky and J. P. Lee, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1352-1357.

Effectiveness of Retrofit in Multi-Family Apartments, Roger Durand, Richard C. Allison and Judith Durand, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

The Effects of Bolt Over-Tightening on Bolted Connections, Edwin R. Schmeckpeper, Richard J. Nielsen and Guy Gentry, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p713-718.

Employers Speak Out on Telecommuting, ME May/June 94, p2-3.

Epoxy-Coated Rebar Scores in West Virginia Study, CE Nov. 94, p12.

Feasibility of Treating Synthetic Greywater by Culturing Waldmann's Dark Green Lettuce in a Hydroponic Sys tem, Ricardo B. Jacquez and Michael Montoya, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994),

p1256-1265. Field Experiments for Wind Effects on Low Buildings, Kishor C. Mehta, Douglas A. Smith and Byron B. Yeatts, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1451-1456.

Field Tests of Railway Bridges, D. A. Foutch, D. H. Tobias and J. Choros, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1118-1123.

Fire Survey Compiles Hot 100, CE Sept. 94, p11-12

Firms Tackle Health-Care Costs, ME May/June 94, p3. First Findings From CERF's Task Force to Europe, CE

The Fleets of San Francisco Crippled by Phony Science, Wm. P. Boland, Jr., (Marinas, Parks and Recreation De-velopments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p162-169.

For Stronger Soil, Throw in Geosynthetic Fibers, Mix Thoroughly and Build, ET June/July 94, p1,6-7.

Fouling of Nanofiltration Membranes by Natural Organic Matter, Francis A. DiGiano, Anne Braghetta, James Nilson and Bruce Utne, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p320-328.

The French Mediation Mission: Siting of Underground Re-search Laboratories, Christian Bataille, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p249-257.

Global Environmental Change: Geoengineering Technology, Lyle M. Jenkins, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p524-531.

Global-Climate Change?, ET Aug./Sept. 94, p11.

Harmonization of Reliability-Based Timber Engineering Codes and Standards, Ronald W. Anthony and Jozsef Bodig, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p503-507.

High Performance Construction Materials and Systems: An Essential Program for America and Its Infrastructure Technical Report, Report 93-5011, Civil Engineering Research Foundation, 1993, 0-87262-939-2, 205pp.

High-Performance Construction Materials and Systems: An Essential Program for America and Its Infrastructure -Executive Report, Report 93-5011.E, Civil Engineering Research Foundation, 1993, 0-87262-938-4, 32pp.

Historic-Flood Evaluation and Research Needs in Mountainous Areas, Robert D. Jarrett, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p875-879.

Horizontally Curved Steel Bridge Research-Update 2, S. R. Duwadi, J. M. Yadlosky and C. H. Yoo, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1071-1076.

How do Integration and Data Models Add Value to a Project? Martin Fischer, Thomas Froese and Douglas Phan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p992-997.

Hydraulic Model Readies River for 1996 Olympics, CE Mar. 94, p26.

Mai. 24, p.20.
Hydro Plant Research Data Acquisition System, James E. Donegan, Julia Crittenden Tarbell and John F. Doyle, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p477-481.

Hydrodynamic Forces in Hydraulic Jump Stilling Basins, António N. Pinheiro, António C. Quintela and Carlos M. Ramos, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p321-330.

In Situ Stress Determination Research Study, William G. Austin and Paul M. Thompson, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p2429-2436. Instream and Streambank Environmental Feature Guidelines, J. Craig Fischenich, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), 4406-410.
Integrated Modelling of Near Field and Engineered Barrier System Processes, Alan Lamont and James Gansemer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1195-1201.

Introduction, Albert F. DiMillio, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p4-10.

It's Official: HITEC Opens for Business, NE Mar. 94, p3 Lunar Base Aspects for Biotechnology Industry, Judith Fielder and Nickolaus Leggett, (Engineering, Construc-tion, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1230-1236. Making Sense of a Sensitive Issue, Stan Reid, (High Level

Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p217-223.

Microgravity Research in a Space Station Environment, Steven D. Del Basso, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p473-482.

Modified Asphalts Tested in Pavement, CE Feb. 94, p8.

New Center Seeks Savings at Nuclear Plants, CE May 94,

New Solar Heating System, ET Oct./Nov. 94, p11.

New Ultrasonic Device Sounds Out Bridges, ET Dec. 94/Jan. 95, p9

Non-Intrusive Experimental Setup for Inflatable Dam Models, T. A. Economides and D. A. Walker, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p500-508.

Nondestructive Evaluation of Wood, Robert J. Ross and Roy F. Pellerin, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1233-1241.

NSF Report Urges More Research on Civil Infrastructure Systems, NE Feb. 94, p3. Objectives of Proposed Large Scale Experimental Facility

(ESTEX), T. M. Parchure, W. H. McAnally, Jr. and G. Nail, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p809-814.

On the Benefits of an Integrated Nuclear Complex for Nevada, James A. Blink and William G. Halsey, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p18-25.

Physical Modelling of the Response of Shingle Beaches in the Presence of Control Structures, Tom T. Coates, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p924-

Portfolio Approach to Strategic Management of A/E Firms, David Veshosky, ME Sept./Oct. 94, p41-47.

Process Selection for Treatment of SOC Contaminated Waters, Bruce I. Dvorak, Desmond F. Lawler and Gerald E. Speitel, Jr., (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p601-608.

Proposed Rule on Recycled Geotextiles Stirs Controversy, CE Oct. 94, p14,17.

Prototype to Product - Challenge and Frustrations, Ian F. C. Smith, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1695-1702.

Radio Remediation, ET Apr./May 94, p11.

Recent Advances in Engineering Design Methodologies, Steven J. Fenves, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p14-24.

Reducing the Long-Term Effects of Zero-Gravity, Jeremiah Rogers and Sarah Coleman, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p833-836.

Relationship of SHRP Binder Test, Frank Fee, (Infrastructure: New Materials and Methods of Repair, Kim D.

Basham, ed., 1994), p114-122.

Representation and Processing of Design Standards: a Bi-furcation between Research and Practice, Steven J. Fenves, James H. Garrett and M. Maher Hakim, (Struc-tures Congress XII, N. C. Baker, ed. and Barry J. Lood-

no, ed., 1994), p122-127.

Results of Prototype Borehole Instrumentation at the Hydrologic Research Facility, Area 25, NTS, Joseph P. Rousseau, Mark Kurzmack and Alison Greengard, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2764-

Seismic Research Program for Highway Construction, Ian G. Buckle and Ian M. Friedland, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994),

p373-379.

Short Synthesis of Some Studies Carried Out for the Re-S. Corsini, (Reconstruction of the West Breakwater, G. Paolella and S. Corsini, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p70-98.

Soft Dikes an Answer to Stone-Dike Collisions, CE Sept.

94, p20-21.

Software Hits the Ceiling, CE Apr. 94, p8.

Some Applications of Neural Networks in Structural Engineering, Jamshid Ghaboussi, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p25-36.

Space Exploration: Getting a Handle on "Why?", Gordon R. Woodcock, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p960-968.

Space Station Microgravity Analysis and Assessment, John P. Wetzel, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p463-472.

Speeding Up Pavement Testing, ET Oct./Nov. 94, p10.

Steep Constructed Stream Channels and Chutes, Kenneth R. Wright, F. Robert McGregor and Gary Lacy, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p657-661.

Study Puts Fragmented Pieces Back Together, ME Jan./ Feb. 94, p13.

Study: Thin Steel Edges Thick Wood, CE Nov. 94, p8. Summers Jobs for CE Students Combine Infrastructure Research with Industrial Internships, CE Feb. 94, p69.

Tampa Hopes to Stop City From Going Down the Drain,

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Testing of Concrete Curtain Wall Panels Reinforced with FRP Grids, Edwin R. Schmeckpeper, Richard Nielsen and Charles H. Goodspeed, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1250-1255.

Thinking Thin for Road Repair, ET Oct./Nov. 94, p6. Three Mile Island Robot Returns to Work, CE Apr. 94,

p24-25. Toward Integrated Models for Structural Design, Namhee K. Hong and Richard Sause, (Computing in Civil Engi-

neering, Khalil Khozeimeh, ed., 1994), p1310-1317. Towards Practical Machine Learning Techniques, Yoram Reich, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p885-892.

Transit Agencies May Face Shortfall, CE May 94, p8.

Tunnel Boring Machine for Nuclear Waste Repository Research Project, Hans A. Janzon, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p403-410. U.S. / Japan Large Scale Cooperative Research Program for Steel Structures, Robert D. Hanson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p103-108.

Urban Runoff Based on Land Use and Particle Size, Linda D. Pechacek, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1242-

The Use of Piezoelectric Film in Cavitation Research, Sauray Paul, Christopher R. Ellis and Roger E. A. Arndt, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed.,

1994), p454-471.

Using Planning Scenarios for DOE Radioactive Waste Management: The Case of the Advanced Neutron Source, David Lewis Feldman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1696-1703.

Warm Weather Ahead?, ET Oct./Nov. 94, p11. Weeding Out Wastes, ET Dec. 94/Jan. 95, p10.

Research and development

Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994, 0-7844-0034-2, Analysis of CE-Related Research Notes Lack of Strategy

and Direction, NE Feb. 94, p5.

Bouncy Turf Tested in Soccer Field, CE Nov. 94, p86.

Center Seeks Partner to Help Prove New Extrusion Proc-

ess, ET Aug./Sept. 94, p9. The Cigar Lake Analog Study: An Interational R&D Project, Jan J. Cramer and F. Peter Sargent, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2237-2242

Coal Log Pipeline Technology: State of Development, Henry Liu and Charles W. Lenau, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed.,

1994), p280-287.

Concept and Programme "Radioactive" Waste Disposal in Geological Formations of Ukraine, D. P. Khrushchov, M. P. Umanets and Eu. A. Yakovlev, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p2305-2309. Congressman Brown Named ASCE Honorary Fellow, NE

Apr. 94, p15.

Constant-Speed Pubping Stations Can Clean Up for the First Time, ET Apr./May 94, p7.

Constructed Civil Infrastructure Systems R&D: A Europe-an Perspective, CERF report #94-5010, Civil Engineering Research Foundation, 1994, 0-7844-0001-6, 145pp Construction Materials, Once Tagged, Could Tell All, ET

Oct./Nov. 94, p9.

Core Message from PNC/H-3 and Key Issues for the Next Milestone, Sumio Masuda, Katsuhiko Ishiguro, Mikazu Yui and Tadashi Mano, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1501-1507.

Developing Air-Emission Curbs, ET Dec. 94/Jan. 95, p10. Dredging Research Program Economic Benefits Study, Fletcher H. Griffis, Sotiris Pagdadis, Charles E. Jettmar and Russell K. Tillman, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1335-1354.

The Dredging Research Program Technical Area 3, William D. Martin, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p11-17

Engineering R&D Strategy, Harvey M. Bernstein, CE Feb. 94, p44-46.

An Eye for Toxics, ET June/July 94, p10.

Federal Cleanups: Good News from Bad, Teresa Austin, CE Mar. 94, p48-51.
Federal Public Works Infrastructure R&D: A New Perspec-

tive, Report No. 93-EF1003, Civil Engineering Research Foundation, 1993, 0-87262-943-0, 76pp.

Finding New Forms of Fuel, ET Aug./Sept. 94, p10.

Global-Climate Model, ET Aug./Sept. 94, p11. High- and Ultrahigh-Performance Concretes Are Ready to Rehearse, ET Apr./May 94, p1,4-5.

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Introducing New Process Technologies into Construction Companies, Maria Laborde and Victor Sanvido, CO Sept. 94, p488-508.

molecular Solution to Radioactive Waste, ET Dec. 94/Jan. 95, p11.

More Funding for R & D Needed in FY 1995 Budget, NE

Apr. 94, p1,3. NDE for Steel Bridges: FHWA Research, Past, Present and Future, Steven B. Chase, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1060-1064.

Predicting Paint's Service Life, ET Aug./Sept. 94, p10. Research and Development — Why bother? Robert J. Tichy, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p683-688.

The Road is Tired, ET Apr./May 94, p11.

Role of Advanced Computer Technology in Construction Industry, Roger M. Henry, CP July 94, p385-389. Smart Highways Graduate to Next Class, CE Oct. 94, p24.

Solar Energy Soars, ET June/July 94, p10-11.

Stack Emissions Monitor May Offer Compliance Proof, CE Dec. 94, p17.

Stake No More?, ET Dec. 94/Jan. 95, p11.

Steam Plant Becomes Biotech Lab. Terry Lundeen, Todd Perbix and John Schwartz, CE Sept. 94, p44-47.

Strategies for Technology Push: Lessons from Construc-tion Innovations, C. H. Nam and C. B. Tatum, CO Sept. 92, p507-524.

Technical Area 5 - Dredging Research Program, Thomas W. Richardson, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1-10.

Texas Asphalt Mix: Greater Strength, Less Filling, ET June/July 94, p7.

Toward Integrated Design of Waste Management Technologies, Sam A. Carnes and Amy K. Wolfe, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p267-274.

Research needs

Problems Faced by Faculty in Minority Institutions, Emmanuel U. Nzewi, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p89-92.

Reservoir design

Explicit Stochastic Modelling of a Reservoir for Hydropower Production, Slobodan P. Simonovic and Rangarajan Srinivasan, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p368-371.

Relocated Canal Leads to Future Reservoir, CE Feb. 94, p19-20.

Reservoir management

Management of Recharge Dams in Saudi Arabia, Fouad F. Al-Muttair, Uygur Sendil and Abdulaziz S. Al-Turbak, WR Nov./Dec. 94, p749-763.

Parallel SDP for Multi-Reservoir Management, Elizabeth A. Eschenbach, Christine A. Shoemaker and Hugh M. Caffey, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p818-821.

Reliability Analysis of a Multi-Reservoir Water Distribution System, Shu-li Yang, Nien-Sheng Hsu, Peter W. F. Louie and William W-G. Yeh, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p855-858.

Time-Series Modeling for Long-Range Stream-Flow Fore-casting, Michael Bender and Slobodan Simonovic, WR Nov./Dec. 94, p857-870.

Reservoir operation

Addressing Central Valley Project Policy Issues Using a General-Purpose Model, Jean M. Boyer, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p509-512.

Analysis of Missouri River System Operations Alterna-tives, Roy McAllister, Lawrence Cieslik, Tom Cannon and Lon Hachmeister, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p814-817.

Conjunctive Operation of Hydroelectric and Thermal Power Plants, Ricardo Harboe, Tirtha Raj Gautam and Pushpa Raj Onta, WR Nov/Dec. 94, p778-793.

A Decision Support System for Multi-Purpose Reservoir Operations, S. B. Shim, H. S. Lee, K. K. Koh, K. D. Shim and D. G. Fontane, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p303-306.

A Decision Support System for Reassessing the Operation of the Chungju Reservoir System, Darrell G. Fontane, Soon Bo Shim and H. S. Lee, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed.

and Harry N. Tuvel, ed., 1994), p299-302.

Demand-Driven Operation of Reservoirs Using Uncertainty-Based Optimal Operating Policies, Haralambos V. Vasiliadis and Mohammad Karamouz, WR Jan./Feb. 94, p101-114.

Description of the Application of Goal Programm Selective Withdrawal Structure Operation, D. G. Fontane and M. L. Schneider, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry

N. Tuvel, ed., 1994), p400-403.

Development and Application of Long Range Study (LRS) Model for Missouri River System, George A. Patenode and Karen L. Wilson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p677-680.

Development of Missouri River Navigation Analysis, David Gjesdahl and Arthur Hawnn, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p686-689.

Evaluating Multi-Purpose Reservoir Operations Using Fuzzy Dynamic Programming, Enrique Moncada, Dar-rell G. Fontane and Timothy K. Gates, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p111-114.

Exploring Management Alternatives with Interactive Simulation, David I. Leib and Thomas C. Stiles, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p210-213. Historical and Enhanced Edwards Aquifer Recharge,

Samuel K. Vaugh, Kelly J. Kaatz and Kenneth L. Choffel, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p380-383.

Improving Reservoir System Operations Under Water Rights Requirements, L. E. Brazil, W. Liu, G. N. Day, D. P. Laurine and R. Steger, (Water Policy and Manage-ment: Solving the Problems, Darrell G. Fontane, ed. and

Harry N. Tuvel, ed., 1994), p588-591.

Numerical Modeling for Sediment-Pass-Through Operations of Reservoirs, Howard H. Chang, Larry L. Harrison, Wing Lee and Scott Tu, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1014-1019.

Opportunities, Constraints and Change in Reservoir Management, William K. Johnson, David T. Ford and Ralph A. Wurbs, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p864-867

Optimal Operation of Multiple-Reservoir System, Philip D. Crawley and Graeme C. Dandy, WR Jan./Feb. 93, p1-17.

Optimization and Reservoir Operations for the Missouri River, Inês C. L. Ferreira and Jay R. Lund, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p93-96.

Regional Wastewater Reuse in the Nueces Estuary, Kelly D. Payne and Samuel K. Vaugh, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p774-777

Reliability Analysis of a Multi-Reservoir Water Distribution System, Shu-li Yang, Nien-Sheng Hsu, Peter W. F. Louie and William W-G. Yeh, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p855-858.

Reoperation of Existing Reservoirs to Serve Changing Needs: Observations on Institutional Inertia, Conflict, Needs: Observations on Institutional Inertia, Connict, and Efficiency, Douglas P. Gillingham, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p565-568.

- Reservoir Operation by the Use of an Expert System, Tiao J. Chang and David Moore, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p97-104.
- Reservoir Operation Using Bayesian Inferencing and Balancing Rules, Emmanuel U. Nzewi, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p173-176.
- Reservoir Sediment Removal: Hydrosuction Dredging, Rollin H. Hotchkiss and Xi Huang, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1020-1024.
- San Diego County Water Authority's Emergency Storage Project Supplying Water During Natural Disasters, Uli Kappus, Ken Steele and Dick Westmore, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p885-588.
- Stochastic Control With Bounded Sample Paths: An Application to Reservoir Systems, S. G. Fletcher and K. Ponnambalam, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1025-1029.
- Stochastic Optimal Control for Determination of Freshwater Inflows to Estuaries, Bing Zhao and Larry W. Mays, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p645-648.
- Susceptibility of Reservoirs to Drought Using Palmer Index, William K. Johnson and Roger W. Kohne, WR May/June 93, p367-387.
- Thoughts of Reservoir Management Studies, Morris Israel, Kenneth W. Kirby and Jay R. Lund, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p.238-241.
- The Transport of Gravels in Boulder-Bed Streams, Alan F. Barta, Peter R. Wilcock and Conor C. C. Shea, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p780-784.
- Uncertainty in Reservoir Operation Optimisation, Kevin S. Tickle and Ian C. Goulter, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p363-367.
- Water-Supply Operations during Drought: Continuous Hedging Rule, Jhih-Shyang Shih and Charles ReVelle, WR Sept./Oct. 94, p613-629.

Reservoir performance

Alameda Creek Water Resources Study, Terry L. Erlewine and Edward H. Stewart, Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p17-20.

Reservoir sedimentation

Determination of Sediment Profile for a Dry Flood Control Basin, Rebecca J. Stonestreet and Scott E. Stonestreet, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1004-1008.

Reservoir storage

- Managing Reservoir Storage for Fish Production, Terry Waddle and Jeff Sandelin, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p49-52.
- Stochastic Control With Bounded Sample Paths: An Application to Reservoir Systems, S. G. Fletcher and K. Ponnambalam, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1025-1029.

Reservoir systems

- Application of the PCRSS Reservoir Simulation Model to the Salt River Project, Jon S. Behrens and Yvonne Reinink, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p295-298.
- Climate Change Impacts on Boston's Water Supply, Paul H. Kirshen and Neil M. Fennessey, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p489-492.

- Development of Hydro-Scheduling Model for Optimal Joint Operation of Multi-Reservoir Systems, S. B. Shim, J. W. Labadie, H. S. Lee, D. K. Koh and K. D. Shim, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p57-60.
- Effects of Climate Change on Water Quality, G. K. Meyer and G. T. Orlob, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p275-278.
- Geographically Distributed Decision Support; The Tennessee Valley Authority (TVA) TERRA System, Rene F. Reitsma, Peter Ostrowski, Jr. and Stephen C. Wehrend, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p311-314.
- Integration of Water Rights and Salinity Considerations in Comprehensive River Basin Management, Ralph A. Wurbs, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p396-399.
- Managing Reservoir Storage for Fish Production, Terry Waddle and Jeff Sandelin, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p49-52.
- Multi-Reservoir System Simulation Design Using C++ and Object Oriented Programming, Jesse Perla and K. Ponnambalam, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1030-1034.
- Multi-Reservoir Systems Optimization by the Aggregation/Decomposition Methodology, M. Bessa, K. Ponnambalam and A. Bogobowicz, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p192-196.
- Optimal Operation of Multiple-Reservoir System, Philip D. Crawley and Graeme C. Dandy, WR Jan./Feb. 93, p1-17.
- Scada System Requirements for Optimum Pumping, Vilas Nitivattanannon, Elaine C. Sadowski and Rafael G. Quimpo, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p110-114.
- Stochastic Control With Bounded Sample Paths: An Application to Reservoir Systems, S. G. Fletcher and K. Ponnambalam, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1025-1029.
- Thoughts of Reservoir Management Studies, Morris Israel, Kenneth W. Kirby and Jay R. Lund, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p238-241.

Reservoirs

- Alternative Formulation of Laterally Averaged Hydrodynamics, John Eric Edinger, Edward M. Buchak and Zhenyu Zhang, HY July 94, p886-890.
- de St-Venant Channel Routing in Distributed Watershed Modeling, Fred L. Ogden, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p492-496.
- Demand-Driven Operation of Reservoirs Using Uncertainty-Based Optimal Operating Policies, Haralambos V. Vasiliadis and Mohammad Karamouz, WR Jan./Feb. 94, p101-114.
- Development of Fisheries Models for the Missouri River System, Mark Harberg, Doug Latka, Tom Cole, John Nestler and Gene Ploskey, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p742-745.
- Evaluation of the Pagosa Springs Geothermal Reservoir and Implications of Potential Additional Reservoir Development, Jon Ford and Dennis McGrane, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p376-379.
- Evaporation and Evapotranspiration under Climate Change in New England, Neil M. Fennessey and Paul H. Kirshen, WR Jan./Feb. 94, p48-69.

Evolution of an Endangered Species Study-The Ouachita Madtom, Gregory M. Quartucci and Fred C. Pinkney, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p846-849.

General Stochastic Unit Hydrograph, Allen Hjelmfelt and Menghua Wang, IR Jan./Feb. 94, p138-148.

An Interagency Overview of Selected Stream Sedimenta-tion Models, Shou-shan Fan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1166-1170.

Luo, Ming, Weilin Xu and Huasheng Liao, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1009-1013.

Mixed-Layer Hydrothermal Reservoir Model. Poshu Huang, Joseph L. DiLorenzo and Tavit O. Najarian, HY

July 94, p846-862.

Modeling Ecological Impacts of Destratification, S. Geoffrey Schladow, David P. Hamilton and Murray C. Burling, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1321-

Non-Point Pollution Loadings and their Impacts on Ten-nessee Valley Reservoirs, Julia Burr Avera and John A. Gordon, (Hydraulic Engineering '94, George Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1247-

Nonlinear Reservoir Routing: Particular Analytical Solution, H. A. Basha, HY May 94, p624-632.

Object-oriented Model of Colorado River Salinity, Nancy E. Winter and Steven C. Chapra, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p392-395.

Preliminary Sizing of Detention Reservoirs to Reduce Peak Discharges, Bruce M. McEnroe, HY Nov. 92, p1540-

1549.

Reconstruction of Concentration Boundary Condition for Unsteady Pesticide Transport Modeling, Deborah J. Mossman and Nael Al Mulki, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p160-164.

Simple Internal Waves and Bores, J. Bühler, HY May 94, p638-645.

Simulating Water Supply Systems of the Raritan Basin, Michael Bennett, Marshall R. Taylor, Che-Hsun Wan and Daniel P. Loucks, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p433-436.

Susceptibility of Reservoirs to Drought Using Palmer Index, William K. Johnson and Roger W. Kohne, WR

May/June 93, p367-387.

Sustainable Management of Existing Reservoirs, Slobodan P. Simonovic, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p242-245.

Unsteady Spillway Inlet Conditions at the Weatherford Water Supply Reservoir, Steven L. Barfuss, J. Paul Tullis and Stuart R. Wilson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p558-562,

Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994, 0-7844-0020-2, 900pp.

Water Quality Enhancement Technology for River-Reservoir Systems, John S. Gulliver and Steven C. Wilhelms, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1331-

Water-Level Control in Hydropower Plants, Oscar F. Jiménez and M. Hanif Chaudhry, EY Dec. 92, p180-193.

Residence time

Hydraulic Residence Time of CSTRs under Unsteady-State Condition, Jian Peng, EE Nov./Dec. 94, p1446-1458.

Residual shear strength

Drained Residual Strength of Cohesive Soils, Timothy D. Stark and Hisham T. Eid, GT May 94, p856-871.

Liquefaction and Embankment Failure Case Histories, 1988 Armenia Earthquake, M. K. Yegian, V. G. Ghahraman and R. N. Harutiunyan, GT Mar. 94, p581-596.

Residual soils

Residual Soil Settlment Related to the Weathering Profile, George F. Sowers, (Vertical and Horizontal Deforma-tions of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1689-1702.

Residual strength

A Study of Alkalinity Leaching and Residual Strength of Alkaline Stabilized Sludge, Andrew P. Kruzic and Thomas M. Petry, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p129-136.

Axisymmetric Vibrations of Thick-Walled Cylindrical Tubes in the Presence of Thermal Residual Stresses, Victor Birman, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p257-265.

Inelastic Response of Metal Matrix Composite Tubes, Robert S. Salzar and Furman W. Barton, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p266-275.

A Nonlinear-Analysis-Based Procedure for Evaluating Load-Carrying Capacity of In-Plane Steel Frames, Fumio Nishino, Buntara S. Gan and Eiki Yamaguchi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1179-1184.

Asphalt Pavement Temperature Related to Arid Saudi Environment, H. I. Al-Abdul Wahhab and F. A. Balghunaim, MT Feb. 94, p1-14.

Behavior of AC-20P Versus AC-30 Asphalt Concrete Mixtures, Peter Sebaaly, Imran Farooq and Jon Epps, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1059-1079.

Field Evaluation of Plate Bearing Load Test on Pavement Soils in Florida, W. Virgil Ping and Ling Ge, (Infrastruc-ture: New Materials and Methods of Repair, Kim D.

Basham, ed., 1994), p231-238.

Flood Loss Assessment with Integrated Measures, Yacov Y. Haimes, Duan Li, Vijay Tulsiani, Eugene Z. Stakhiv and David Moser, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p219-233.

Mechanical Properties of Stone Mastic Asphalt, M. N. Partl, T. S. Vinson and R. G. Hicks, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed.,

1994), p849-858.

Poorer Is Riskier: Opportunity for Change, Richard C. Schwing, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p102-121.

Proposed Uniform Scale for Stiffness of Unbound Pavement Materials for Pavement Design, Herbert F. South-gate and Kamyar C. Mahboub, TE Nov./Dec. 94, p940-952.

Resilient Moduli of Granular Materials, Musharraf Zaman Dar-Hao Chen and Joakim Laguros, TE Nov./Dec. 94,

Resilient Modulus for Fine-Grained Subgrade Soils, Dingqing Li and Ernest T. Selig, GT June 94, p939-957.

Resilient Modulus Test Protocol for Cement Stabilized Phosphogypsum, Michael I. Pericleous and John B. Metcalf, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p491-498.

Seasonal Variation of Resilient Modulus of Subgrade Soils, Myung S. Jin, K. Wayne Lee and William D. Kovacs, TE July/Aug. 94, p603-616.

Thermoplastic Stabilization of MSW Combustor Ash, Vincent T. Breslin and Shawn E. Tisdell, EE Jan./Feb. 94, p154-168.

Resistance

Nesistance Dynamic Testing of Unreinforced Brick Masonry Infills, Ghassan Al-Chaar, Richard Angel and Daniel P. Abrams, (Structures Congress XII). N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p791-796.
Resistance Mechanisms in RC Building Frames Subjected to Column Failure, Haluk Sucuoğlu, Ergin Çıtıpıttoğlu and Sinan Altın, ST Mar. 94, p765-782.

Resistance coefficients

Dimensionally Homogeneous Manning's Formula, Ben Chie Yen, HY Sept. 92, p1326-1332.

Calibration of Current Factors in LRFD for Steel, David V. Rosowsky, Ahmed F. Hassan and N. V. V. Phani Kumar, ST Sept. 94, p2737-2746.

Effect of Aggregation on Vibrio Cholerae Inactivation, Robert M. Clark, Eugene W. Rice, Bennett K. Pierce, Clifford H. Johnson and Kim R. Fox, EE July/Aug. 94,

Expandable Structures with Incorporated Roofing Elements, J. P. Valcárcel, F. Escrig and E. Martín, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994). p752-761.

LRFD vs. ASD for Wood Structures, David G. Pollock and Thomas G. Williamson, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p76-85.

Worldwide Calibration of API RP2A-LRFD, R. C. Turner, C. P. Ellinas and G. A. N. Thomas, WW Sept./Oct. 94,

p423-433.

Analysis of Prototype Long Period Waves for Los Ange-les/Long Beach Harbor Resonance Studies, William C. Seabergh, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994),

P13-27.
The Daytona Beach "Large Wave" Event of 3 July 1992, Robert J. Thicke, Robert G. Dean and Andrew W. Garcia, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p45-

Dynamics of Elastic Cable Under Parametric and External Resonances, Y. Cai and S. S. Chen, EM Aug. 94, p1786-1802.

p1/30-1302.
An Energy Based Model for Coastal Bays and Lakes, William S. Appleton, William L. Wood and Yan-Sheng Chang, (Estuarine and Coastal Modeling III, Malcoling, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), e565.57 p565-577.

Nonlinear Lateral, Rocking, and Torsional Vibration of Rigid Foundations, Ronaldo I. Borja, Wen-Hwa Wu, Alexander P. Amies and H. Allison Smith, GT Mar. 94,

Resource allocation

An Artificial Neural Network Approach to Allocating Con-struction Resources, Abdullah M. Alsugair and David Y. Chang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p950-957.

Automated Construction-Simulation Optimization, Simaan AbouRizk and Jingsheng Shi, CO June 94, p374-385.

Boating Needs Assessments (BNA) for Evaluating Boat Ramp and Facilities Needs, for Guerry Taylor and James Paul Posda, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p20-28.

Cleaning Wastewater Isn't Cheap, CE July 94, p8.

Intelligent Construction Planning, A. Warszawski and O. Shaked, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p972-979.

Prioritizing Transit Markets Using Analytic Hierarchy Process, Snehamay Khasnabis and Bharat B. Chaudhry, TE Jan./Feb. 94, p74-93.

Three-dimensional Modeling for Improving Construction Process Performance, Amarjit Singh, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1156-1163.

Resource conservation

Lessons for Effective Urban-Containment and Resource-Land-Preservation Policy, T. Moore and A. C. Nelson, UP Dec. 94, p157-171.

Menomonce Valley Greenway Feasibility Study, Therese Gripentrog, Wink Hastings and Eduard J. Freer, (Mari-nas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p1-6.

Resource development

Carbon Formation Theory for Space Oxygen Processes, Peter E. Nolan, Andrew Hall Cutler and David C. Lynch, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1199-1209.

The Challenge of Mining He-3 on the Lunar Surface: How All the Parts Fit Together, Igor N. Sviatoslavsky, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994),

p668-677.

Construction of a Lunar Base, Dave Torres, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p799-803. Helium-3 on the Moon: Model Assumptions and Abundan-

ces, Lawrence A. Taylor, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p678-686. In-situ Extraction of Lunar Soil Volatiles, Layton J. Wit-

tenberg, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj,

ed., 1994), p687-696. Lunar ISRU: An Evolutionary Approach, John L. Paterson, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1077-1085.

Lunar Mining, Carrie Barkhurst, (Engineering, Construc-tion, and Operations in Space IV, Rodney G. Galloway,

ed. and Stanley Lokaj, ed., 1994), p811-814.

Lunar Oxygen Production in a Hydrogen "Cold" Plasma,
Daniel E. Bullard, Peter E. Nolan and David C. Lynch, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed.,

1994), p1188-1198. Mineral Liberation and Beneficiation of Lunar High-Ti Mare Basalt, 71055: Digital-Imaging Analyses, John G. Chambers, Lawrence A. Taylor, Allan Patchen and David S. McKay, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p878-888.

A Minimum Mars Mission Approach, Systems Engineering A Minimum Mars Swission Apploach, Systems Engineering Division Mars Study Team, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1309-1322.

Oxygen from Lunar Soil via Fluorination, Wolfgang Seboldt, Stephan Lingner, Stephan Hoemes and Wolf-

gang Grimmeisen, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1210-1219.

A Remote Sensing Evaluation of Lunar Pyroclastic Deposits, B. Ray Hawke and Cassandra R. Coombs, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994),

Remote Sensing of Astrofuel™, K. R. Harris, H. Y. Khater and G. L. Kulcinski, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p648-657. Reservoir Estimates for the Sulpicius Gallus Region, Bon-

Reservoir Estimates for the Sulpicius Gailus Region, Bon-nie Cooper, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p889-896.
Robotic Options for Mining of Near-Earth Objects, Russell J. Miller and Robin R. Murphy, (Robotics for Challeng-ing Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p457-463. Roles of the Lunar-Solar Power System In Development of

the Resources of Greater Earth for Mankind, David R. Criswell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p638-647.

Update of the Implications of Recent Space Resource Discovery, Anthony Zuppero and Pat Whitman, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p532-

541.

Utilization of Liquid Carbon Dioxide for Planetary Exploration, Nobuki Kawashima, Ei-ichi Mizuno, Kazuya Takeda and Masaki Kojima, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1070-1076. Resource management

Balancing Recreational, Economic Development and Environmental Protection Goals for New Recreational Boat-ing Facilities in the State of Wisconsin, U.S.A. Fred Klancnik, James Rooney and Larry Freidig, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p7-19.

Beneficial Uses of Dredged Material on the Upper Great Lakes, Douglas J. Zande and M. Pamela Horner, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p654-663.

Beneficial uses of dredged material principles and practice, T. Neville Burt and Michael P. Dearnaley, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p631-643.

Beneficial Uses of Dredged Material: Part of the Solution to Restoration of Louisiana's Coastal Wetlands, Linda Glenboski Mathies, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p626-630.

Beyond CPM: The Deck-of-Cards Paradigm, Francois Grobler, K. Praveen Reddy and Carol Subick, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p2046-2053.

Clean Water is not Enough, James R. Karr, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p79-95.

Engineering Sustainable Development, John Prendergast, CE Oct. 93, p39-42.

A Goal Driven Approach to Discrete Event Simulation, Abdullah M. Alsugair and David Y. Chang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p515-522.

An Integrated Approach To Repetitive Construction Plan-ning, Boliver A. Senior and Daniel W. Halpin, (Comput-ing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p25-32.

Optimal Markup Policy in Sequential Competitive Bidding, Hongbin (Ben) Chen, Robert I. Carr and Photios G. Ioannou, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1548-1555.

Progress in England and Wales on the Development of Beneficial Uses of Dredged Material, L. A. Murray, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p644-

Review of Postconstruction Evaluation Procedures for Infrastructure Projects, Yuzo Akatsuka, ME Jan./Feb. 94,

Simulating Water Supply Systems of the Raritan Basin, Michael Bennett, Marshall R. Taylor, Che-Hsun Wan and Daniel P. Loucks, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p433-436.

Source Evaluation of Solid Waste in Building Construc-tion, Rafael M. Gavilan and Leonhard E. Bernold, CO

Sept. 94, p536-552

State and Resource Based Construction Process Simulation, Julio Martinez, Photios G. Ioannou and Robert I. Carr, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p177-184.

Resource recovery

Analysis of Inflating Habitable Space Structures with neomass (near-Earth-object mass), Anthony Zuppero, Nancy Linarez-Royce and Pat Whitman, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p247-256.

Linear Programming for Analysis of Material Recovery Facilities, Jay R. Lund, George Tchobanoglous, Robert P. Anex and Renée A. Lawver, EE Sept/Oct. 94,

p1082-1094.

Resource Recovery Facilities for Earth Approaching Comets, Thomas C. Taylor, Anthony C. Zuppero and Lucy-Ann McFadden, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p562-571.

System for Orbital Recovery of Space Shuttle's External Tank, Raul Ferri, AS Jan. 94, p92-103.

Resources

Clean Water is not Enough, James R. Karr, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p79-95.

Response spectra

Fracture Energy Formulation for Inelastic Behavior of Plain Concrete, G. Etse and K. Willam, EM Sept. 94, p1983-2011.

An Interactive Computer Code for Generations of Artificial Earthquake Records, D. L. Karabalis, G. J. Cokkinides, D. C. Rizos, J. S. Mulliken and R. Chen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1115-1122.

Reliability-Based Optimum Design for UBC and Nonde-terministic Seismic Spectra, C. C. Chang, J. F. Ger and F.

Y. Cheng, ST Jan. 94, p139-160.

Seismic Random-Vibration Analysis of Multisupport-Structural Systems, Ernesto Heredia-Zavoni and Erik H. Vanmarcke, EM May 94, p1107-1128.

Approximate Random Vibration Analysis of Classically Damped MDOF Systems, C. Papadimitriou and J. L. Beck, EM Jan. 94, p75-96.

The Day User, Marcus D. Hodges, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p506-513.

Variability Response Functions of Stochastic Plane Stress/ Strain Problems, Friedrich J. Wall and George Deodatis, EM Sept. 94, p1963-1982.

Responsibility

Contemporary Model of Civil Engineering Failures, Richard L. Meehan, Brian Chun, Sang-wuk Ji, Stephanie King, Knut Ronold and Frank Yang, El Apr. 93, p138-

Debating Steel - Connection Design, Alexander Newman, CE Feb. 94, p52-55.

Ethical Responsibilities of Engineering Profession, Mark J. Holliday, El July 94, p270-272.

Geotechnical Baseline Reports, Teresa Austin, CE Dec. 94. p56-57.

OSHA and the Design Professional, Arthur G. Sapper, CE Apr. 94, p60-62.

Restoration

Beneficial Uses of Dredged Material: Part of the Solution to Restoration of Louisiana's Coastal Wetlands, Linda Glenboski Mathies, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p626-630.

Guidance for Wetland Restoration with Dredged Material, Michael R. Palermo and Elba A. Dardeau, Jr., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p956-960.

Habitat Restoration Using Dredged Material: The Sonoma Baylands Wetland Demonstration Project, Scott P. Miner, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p928-937.

High-Wire Rehab for Historic Retaining Walls, CE Nov. 94, p14,16.

Kissimmee River Restoration Study, Hsieh Wen Shen, Guillermo Tabios, III and James A. Harder, WR May/

June 94, p330-349.

Milwaukee County Parks' Brown Deer Golf Course Lands P. G. A. Tour Event: A Gem of a Golf Course is Polished to a New Brilliance, Steve Bailey, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p536-543.

New Applications and Practices for Beneficial Uses of Dredged Material, M. C. Landin, J. Fowler and H. H. Allen, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994),

Offshore Rescue, Jonathan A. French, Paul Gustafson, John S. Murk and Kellene M. Burn-Lucht, CE Oct. 94, p42-

Pink Sandverbena Recovery Efforts, Eric P. Braun and Thomas Kaye, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1441-1450.

Restoration and Capping of Contaminated Sediments, Carl E. Stivers and Robert Sullivan, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1017-1026.

Restoration of Wetland Ecosystems: A Challenge to Our Nation's Civil Engineers, James T. B. Tripp, (National Water Resources Regulation: Where is the Environmental Control of the Control tal Pendulum Now?, Howard Holme, ed., 1994), p229-232

Restoring and Protecting Marine Habitat, Thomas A. Sands and Wayne Young, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p368-377.

Restoring Freedom at the Capitol Dome, James R. Cagley, CE June 94, p57-59.

Three-Way Trade Saves Historic Michigan Bridges, CE Nov. 94, p22,24.

Use of Abandoned Pipeline to Transport Sediment to Marshes, Charles H. Coates, Jr., (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1101-1110.

Restraint systems

Structural System Changes by Means of Forcedly Applied Restraints, Angelo Marcello Tarantino, EM Feb. 94,

Retaining walls

Analysis of Port Allen Lock in Elastic-Plastic Soil Medium, Hsi Chi Yang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p865-872.

Collapse of Geogrid-Reinforced Retaining Structure, Gerald A. Leonards, J. David Frost and Jonathan D. Bray, CF Nov. 94, p274-292.

Contracting for Tiedback Walls on a Design-Build Basis, Hubert J. Deaton, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p17-23

Design, Construction and Performance of a Soil Nailed Wall in Puerto Rico, Suang S. Cheng and Lawrence A. Hansen, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p1-16.

Dynamic Lateral Pressures Due to Saturated Backfills on Rigid Walls, Isao Ishibashi, Makoto Osada and Tatsuo

Uwabe, GT Oct. 94, p1747-1767. Dynamic Modeling and Response of Soil-Wall Systems, Anestis S. Veletsos and Adel H. Younan, GT Dec. 94,

p2155-2179.

Estimating Basal-Heave Stability for Braced Excavations in Soft Clay, A. T. C. Goh, GT Aug, 94, p1430-1436. Generalized Coulomb Active Earth Pressure for a Distanced Surcharge, Ernesto Motta, GT June 94, p1072-

High-Wire Rehab for Historic Retaining Walls, CE Nov. 94, p14,16.

Hybrid Finite Element/Discrete Element Model for Large Deformation Geotechnical Engineering Problems, Isao Ishibashi, Tarun K. Agarwal and You Wang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p857-864.

Passive Earth Pressures with Various Wall Movements, Yung-Show Fang, Tsang-Jiang Chen and Bin-Ferng Wu, GT Aug. 94, p1307-1323.

The Performance and Behaviour of Biological Filter Walls as Affected by Cyclical Temperature Changes, George L. England, (Serviceability of Earth Retaining Struc-

Lagant, Cerviceaning of Earth Retaining Struc-tures, Richard J. Finno, ed., 1994), p57-76.

Performance Summary of the Tanque Verde Project-Geogrid Reinforced Soil Retaining Walls, James G. Col-lin, Donald G. Bright and Ryan R. Berg, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p43-56.

Racine's Water Street Retaining Wall, Steven W. Hunt, Randy L. Frank, Paul A. Tarvin and James J. Blazek, (Serviceability of Earth Retaining Structures, Richard J.

Finno, ed., 1994), p137-154. Retaining and Flood Walls, U.S. Army Corps of Engineers,

1994, 0-87262-968-6, 320pp.
Seismic Lateral Pressures in Soils with Cohesion, R. Richards, Jr. and X. Shi, GT July 94, p1230-1251.

Serviceability of Earth Retaining Structures, Geotechnical Special Publication No. 42, Richard J. Finno, ed., 1994, 0-7844-0051-2, 160pp.

Settlement Behavior of an Avalanche Protection Gallery Founded on Loose Sandy Silt, Walter Steiner, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p207-221.

Temporary Shoring Support Systems in an Urban Environment, John E. Reinfurt, Thomas C. Anderson, Paul Reitz and Tony Licari, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p24-42.

Retention

Save That Employee Rather Than Fire, Anne Glad, ME July/Aug. 94, p16-18.

Selection of Earth Retention Systems Using Expert System, V. Sinha, M. Arockiasamy and A. Sinha, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p418-

Retention basins

Miami International Airport Stormwater NPDES Plan, Armando I. Perez, Jonathan Z. Goldman, Michael F. Schmidt and Edward E. Clark, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p540-547.

Effect of HRT on Acidogenic Digestion of Primary Sludge, P. Elefsiniotis and W. K. Oldham, EE May/June 94. p645-660.

Mechanism of Biological Treatment in Plug-Flow or Batch Systems, Hasan Ali San, EE July/Aug. 92, p614-628.

ASCE Executive Director Announces Retirement Plans, CE Jan. 94, p76.

Retrofitting

Aftershocks: The Legacy of Loma Prieta, John Prendergast, CE Jan. 94, p46-49.

Analysis of a Concrete Cylinder with a Composite Hoop Wrap, Christopher P. R. Hoppel, Travis A. Bogetti, John W. Gillespie, Jr., I. Howie and Vistasp M. Karbhari, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p191-198.

Analytical Model for Steel-Jacketed RC Circular Bridge Columns, Y.H. Chai, M. J. N. Priestley and F. Seible, ST

Aug. 94, p2358-2376.

Application of High-Performance Steel in New and Retrofit Structures, Robert J. Dexter, Le-Wu Lu and John W. Fisher, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p336-343.

Building Code Enforcement Issues, Hindsight and Foresight, John C. Pistorino, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p125-132. Caltrans Seismic Rehab in Fast Lane, CE June 94, p11.

Channel Stabilization and Retrofit, Ken Nilsen, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p718-721.

Computer Based Energy Analysis for Mechanical Retrofit of Buildings, Joseph Staib, Matt Syal and David Peters, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1349-1356.

Computer-Integrated Construction, Bruce C. Coles and Kenneth F. Reinschmidt, CE June 94, p50-53.

Damage Tolerance Analysis in Structural Rehabilitation, Charles J. Hookham, (Analysis and Computation, Frank-lin Y. Cheng, ed., 1994), p94-103.

Developing Retrofit Strategies for the China Basin Viaduct Foundations Using Non-linear, Hysteretic Analysis, D. R. Parker, John C. Castro and R. A. Dameron, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1839-1845.

Earthquake Barrier Technology: Sliding-Friction Energy Dissipation, Marc S. Caspe, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1018-

1023.

Effectiveness of Retrofit in Multi-Family Apartments, Roger Durand, Richard C. Allison and Judith Durand, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p412-415.

Engineering of the Building Envelope "To Do Or Not To Do", Norris Stubbs and Dale C. Perry, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p10-30.

Evaluation of Cast Iron Columns for Safety and Reliability, Joel S. Weinstein, William Lamartina and Mark Tamaro, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1544-1549.

Expert System with Learning Ability for Retrofitting Steel Bridges, Ichizou Mikami, Shigenori Tanaka and Akira

Kurachi, CP Jan. 94, p88-102.

Fiber Composite Warp for Rehabilitation of Concrete Structures, Salem S. Faza and Hota V. S. GangaRao, (Infrastructure: New Materials and Methods of Repair. Kim D. Basham, ed., 1994), p1135-1139.

Fiber Wraps Migrate East, CE July 94, p11. Floor to Wall Anchors in Historic Brick Buildings, W. Bradford Cross and Nicholas P. Jones, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p1569.

Hi-Tech Seismic Rehabilitation of 'Casino De Montreal', Claude Pasquin, Avtar Pall and Rashmi Pall, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p1292-1297

Implementation of Passive Energy Dissipation Systems in the United States, Andrew S. Whittaker and Ian D. Aiken, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1280-1285.

Lateral Response of Unreinforced Masonry Infill Frame Panels, James A. Hill, (Analysis and Computation,

Franklin Y. Cheng, ed., 1994), p77-83. Lessons Learned from the Hurricanes of 1992, Ronald A. Cook, Mehrdad Soltani and Timothy A. Reinhold, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p799-802.

Nonlinear Analysis and Experimental Validation of a Stiffening Truss Chord of the Golden Gate Bridge, R. A. Dameron, R. S. Dunham and J. C. Castro, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

One Engineer's Wish List for Hurricane Hazard Mitigation, Ronald F. Zollo, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p268-277.
Redefining the Roles Insurers and Engineers Play in Hurri-

cane Preparedness and Mitigation, Eugene L. Lecomte, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p1-9.

Retrofit Racks for Revenues, Patrick Farrell, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p499-505.

Retrofitted Bridge Quickly Tested by Quake, CE Mar. 94,

Retrofitting a Regional Stormwater Facility, Richard L. Schaefer, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p209-219. Road to Recovery, Ray Zelinski, CE Apr. 94, p36-39.

Seismic Evaluation of the Macy Street Bridge, Los Angeles, California, Using 3-D Nonlinear Pushover Methodologies, John C. Castro and Jason S. Maxwell, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p1099-1105.

smic Isolation Retrofit of Existing Bridges, Ronald I Mayes, Deepak Choudhury, Robert S. Crooks, David M. Jones and Richard P. Knight, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed.,

1994), p1179-1186. Seismic Performance and Retrofit of the Golden Gate Bridge, Charles Seim, Tim Ingham, Ph.D. and Santiago Rodriguez, (Spatial, Lattice and Tension Structures.

John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p763-771. Seismic Renewal of Civil Infrastructure Systems, M. P. Singh and S. C. Liu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1508-1513.

Seismic Research Program for Highway Construction, Ian G. Buckle and Ian M. Friedland, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p373-379.

Seismic Response and Retrofitting of Non-Ductile Reinforced Concrete Bridges, James Ricles, Yuch-Shiun Yang and M. J. Nigel Priestley, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1226-1231.

Seismic Retrofit of R/C Columns with Inadequate Lap Splices, R. S. Aboutaha, M. D. Engelhardt, J. O. Jirsa and M. E. Kreger, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1502-1507.

Seismic Retrofits Should be Required (ltr), CE July 94,

A Shear-Flexure Model for Non-Ductile Reinforced Concrete Bridge Columns under Biaxial Seismic Loading, Yueh-Shiun Yang, James Ricles and M. J. Nigel Priest ley, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1232-1237.

U.S. Firm to Engineer Coal-Plant Retrofit in 'Black Trian-

gle', CE Mar. 94, p14,18.

The Use of High Performance Fiber Reinforced Cement Composites for Seismic Rehabilitation, Neven Krstulovic-Opara, Chia-Ming Uang and Abdol Haghayeghi, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p812-819.

Utilizing Visco-Elastic Dampers in the Seismic Retrofit of a Thirteen Story Steel Framed Building, Patrick Crosby, James Kelly and J. P. Singh, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1286-1291.

Return flow

Evaluation of the Return Period of the September 1992 Flood in Genova, Italy, Paolo Bartolini and Juan B. Valdés, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p102-106.

Conservation Before and After: The Impacts of Increasing Block Rates on a Fully Metered System, David LaFrance and Angela C. Montoya, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p798-801.

Revenue Enhancement for Water and Wastewater Systems, Jerry R. Rogers, ed. and William P. Bullock, Jr., ed.,

1994, 0-7844-0030-X, 35pp.

Solving Collections Problems to Increase Revenue: The Houston Experience, 1988-1993, Karen Philippi, (Revenue Enhancement for Water and Wastewater Systems, Jerry R. Rogers, ed. and William P. Bullock, Jr., ed., 1994), p8-14.

Utilizing Coordinated Billing and Metering Systems Anal-ysis to Enhance Utility Revenue on a Shared Revenue Basis, Randy P. Schuler, (Revenue Enhancement for Water and Wastewater Systems, Jerry R. Rogers, ed. and William P. Bullock, Jr., ed., 1994), p15-23.

Colloidal Fouling of Reverse Osmosis Membranes, Menachem Elimelech and Xiaohua Zhu, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p329-335

Treatment of Drinking Water Containing Bromate and Bromide Ions, Taha F. Marhaba and Steven J. Medlar, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p476-

Revetments

Dredged Material Used in Sand-filled Containers for Scour and Erosion Control, Lee E. Harris, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p537-546.

Fraser Lands Riverfront Park Shoreline Edge Treatments, Stanley R. Cowdell and Harold C. Westerman, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p114-123.

Irregular Wave Overtopping of Revetments in Surf Zone Nobuhisa Kobayashi and Andrew W. Raichle, WW Jan./Feb. 94, p56-73.

OTF Kinematic GPS Positioning for Vertical Reference Datum, Al Rougeau, Dean Pottle and Larry Rosenbalm, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p288-

Use of HEC-2 and HEC-6 to Determine Levee Heights and Revetment Toe Scour Depths, David T. Williams and David Cozakos, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1075-

Reviewing

More Than an Underground Success, James Denning, CE Dec. 93, p42-45.

Accounting Software for Very Small Firms, CC Jan. 94,

Accounting Software for Very Small Firms (Part 2), Todd Salkovitz, CC Feb. 94, p14-15.

AutoCAD LT Overview, M. Kevin Parfitt, CC June 94, p14-16.

Construction Estimating Software, Marc T. Pritchard, Tim Culligan and Rick Kimble, CC Feb. 94, p1-6.

Creating and Abstracting Lessons-Learned from BCO Reviews, Michael C. Fu and E. William East, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1146-1155.

The Evolution of Breakwater Design, Billy L. Edge, Or-ville T. Magoon and William F. Baird, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p1024-1039.

The History and Present Status of Microwave Aircraft, William C. Brown, (Engineering, Construction, and Operations in Space IV, Rodney G, Galloway, ed. and Stanley Lokaj, ed., 1994), p1482-1491.

Hydraulics and Hydrology for the User, Randel L. Dy-mond, CC May 94, p1,12-14.

Integrated Product Models, Charles M. Eastman, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), pl188-1195.

Machine learning Applications for Automated Constructa-bility Reviews, Kamolwan Lueprasert and Miroslaw J. Skibniewski, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p893-900.

Nuclear Regulatory Commission Staff Approaches to Improving the Integration of Regulatory Guidance Documents and Prelicensing Reviews, Robert L. Johnson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1604-1608.

Overview and Status of NRC's High-Level Waste Repository Program, Mark S. Delligatti, Joseph J. Holonich and B. J. Youngblood, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1597-1603.

Overview of the Spanish High Level Radioactive Waste Programme, A. López and A. R. Beceiro, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2284-2290.

Project Management Software: Putting It Through the Paces, Julie Hart, CC Jan. 94, p8-9.

Review of Advanced Techniques for Waste Canister La-beling, William G. Culbreth, Bharani Kumar Bhagi and Anand Kanjerla, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1791-1795.

Secretary of Energy Review of the Civilian Radioactive Waste Management Program, Christopher A. Kouts, Allen B. Benson and Patricia Van Nelson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p9-12.

Site Characterization and Related Activities at the Potential High-Level Radioactive Waste Repository Site at Yucca Mountain, Nevada, Carl P. Gertz, Paul L. Cloke, Robert M. Nelson, Jr. and Maxwell B. Blanchard, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2291-2296

Space Stations Past, Present, and Future, Keegan Kimbrough, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p837-841.

Three Graphics Presentation Packages You Can Count On, M. Kevin Parfitt, CC Jan. 94, p1-5.

Void Fraction Measurement Techniques for Gas-Liquid Bubbly Flows in Closed Conduits; A Literature Review, Mahmood Naghash, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p278-288.

Reynolds stress

544

Investigation of an Anisotropic k-ε Model, Yun Zhang, Yongquan Yang and Chigong Wu, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1280-1284.

Turbulent Structure of Water and Clay Suspensions with Bed Load, Zhaoyin Wang and Peter Larsen, HY May 94, p577-600.

Rheological properties

Modified Asphalt Binders - How Do They Compare? Ran-dy C. Ahlrich and Gary L. Anderton, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p64-74.

Paste Rheology, Leslie J. Struble and Mark A. Schultz, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p147-158.

Rheological Evaluation of Engineered Asphalt Binders, H. U. Bahia and N. I. Kamel, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p97-113.

The Use of Crumb Rubber Modifier in Hot-Mix Asphalt, Mark S. Buncher and E. R. Brown, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p53-63.

Rheology

Modification of Asphalt Binders: A Critical Evaluation Using the New SHRP Methods, H. U. Bahia, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p859-879.

Paste Rheology, Leslie J. Struble and Mark A. Schultz, (Cement Manufacture and Use, Paul W. Brown, ed.,

1994), p147-158.

Rheological Characterization of Asphaltic Mixtures Under Repetitive Loading, Y. R. Kim and Y. C. Lee, (Infra-structure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p796-803.

Application of WQMAP to Upper Narragansett Bay, Rhode Island, J. C. Swanson and D. L. Mendelsohn, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p656-678.

Three Dimensional Modeling of Circulation and Salinity in Mt. Hope Bay and the Lower Taunton River, Wenrui Huang and Malcolm M. Spaulding, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p500-508.

Richart, F.E. Jr.

Richart, 75, Dies; Was Pioneer in Foundation Vibrations And Soil Dynamics, CE Dec. 94, p73.

Evaluating Ride-Sharing Programs: Massachusetts' Experience, John Collura, UP Mar. 94, p28-47.

Rail Service to Airports, Peter B. Mandle, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p140-149.

Rail-Air: A Multi-Modal Opportunity in a Changing World, Alastair Duff, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p150-158.

Rigging

Rigging Records Are Many (ltr), CE July 94, p27-28.

Right of way, land

Protecting a Pipeline, Manuel Garcia-Lopez and Donald H. Gray, ČE Dec. 94, p44-47.

Right-of-way

Community Greenways are Linear Recreationways, Robert D. Espeseth, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p520-525.

Rigid frames

Dynamic Behavior of Slant-Legged Rigid Frame Highway Bridge, Ton-Lo Wang, Dongzhou Huang and Mohsen Shahawy, ST Mar. 94, p885-902.

Dynamic Loading of a Rigid Frame Bridge, Dongzhou Huang, Ton-Lo Wang and Mohsen Shahawy, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p85-90.

Practical Second-Order Inelastic Analysis of Semirigid Frames, W. S. King and W. F. Chen, ST July 94, p2156-

Seismic Analysis of Bridges: Simplified or Refined Approach, Y. Chen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p79-84.

Rigid pavements Biaxial Testing of Brittle Repair Material for Rigid Pavements, George Z. Voyiadjis and Taher M. Abu-Lebdeh, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p964-971.

Dynamic Loading of Airfield Pavements Caused by Air-

craft Operations on Rough Runways, Anthony G. Gerar-di and Wayne G. Johnson, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p30-41.

Implementation of Elastic Layered Theory for Design of Unbonded Overlays, Walter R. Barker, Jim W. Hall, Jr. and Carlos R. Gonzalez, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed.,

1994), p42-52.

Load Transfer Determination for Airfield Pavements Using the Falling Weight Deflectometer, Michael I. Hammons and David W. Pittman, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p523-530.

Proposed Uniform Scale for Stiffness of Unbound Pavement Materials for Pavement Design, Herbert F. Southgate and Kamyar C. Mahboub, TE Nov./Dec. 94, p940-

Rigid Pavement Evaluation with Seismic Pavement Analyzer, S. Nazarian, M. Baker and K. Crain, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p508-515.

Rigid Pavement Rehabilitation at the San Marcos Municipal Airport, San Marcos, Texas, Franklin Hines and David Pickett, (Infrastructure: New Materials and Meth-ods of Repair, Kim D. Basham, ed., 1994), p531-538. Temperature Effects on Rigid Pavements, I. E. Harik, P.

Jianping, H. Southgate and D. Allen, TE Jan./Feb. 94, p127-143.

Rigid-body dynamics

Beam-Buckling Analysis via Automated Rayleigh-Ritz Method, C. M. Wang, L. Wang and K. K. Ang, ST Jan. 94, p200-211.

Next Generation Space Telescope. I: Design Considera-tions, B. Scott May and Nicholas P. Jones, AS Oct. 94,

Next Generation Space Telescope. II: Proposed Pointing Control System, B. Scott May and Nicholas P. Jones, AS Oct. 94, p375-397.

Slender Rigid Block Motion, S. J. Hogan, EM Jan. 94, p11-24.

Rigidity

Case Study - Performance of Diaphragm Walls During Construction; Predictions vs. Field Measurements, Abdol R. Haghayeghi and Mehrdad Mirzakashani, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p264-270.

Numerical Study of Underpinning by Piles for Settlement Control of Strip Foundations, M. Makarchian and H.G. Poulos, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and

Guy Y. Félio, ed., 1994), p303-313.

Static Behavior of Pultruded GFRP Sections, Hota V. S. GangaRao and V. Nagaraj, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p844-848.

Turbulent Boundary Layer Over Flat Plate with Rigid and Flexible Surfaces, M. S. Abu Sharekh, S. K. Pathak, G. L. Asawa and P. D. Porey, EM Aug. 94, p1675-1695.

Rills

Spatially Averaged Conservation Equations for Interacting Rill-Interrill Area Overland Flows, Gokmen Tayfur and M. Levent Kavvas, HY Dec. 94, p1426-1448.

Rings

Axisymmetric Plastic Plates with Ring Supports at Optimum Locations, C. M. Wang, S. K. Ting and W. A. M. Alwis, EM Feb. 94, p400-407

Out-of-Plane Buckling of Restrained Thin Rings of General Open Section, J. G. Teng and R. M. Lucas, EM May

94, p929-948.

Velocity Control Rings for RC Pipe on Steep Slopes, Glen Drogin, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p928-932

Rio Grande

Red Grande Sediment Modeling in the Rio Grande Conveyance Channel, Drew C. Baird and Cassie C. Klumpp, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1151-1155.

Study of Friction Factors in the Upper Reaches of the Rio Grande, Cassie C. Klumpp and Drew C. Baird, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p702-706.

Riparian land

Development of a Wetland/Riparian Resource Model for the Missouri River System, C. McShane, D. Becker, R. Tressler, J. Cannon and J. Rude, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p746-749.

Floodflow Effects on Riparian Vegetation in Arizona, J. V. Phillips and H. W. Hjalmarson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p707-711.

Riparian rights

Administering a Regulated Riparian System of Water Rights, Joseph W. Dellapenna, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p881-884.

Convergence and Divergence Between Regulated Riparian and Prior Appropriation Provisions in the ASCE Model State Water Rights Code, Ray Jay Davis, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p465-468.

Lake Ontario Regulation Utilizing an Expert System Approach Constrained by Interest Satisfaction Relationships, Anthony J. Eberhardt, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p149-152.

Reallocation Impacts of Eastern Water-Law Changes, Wil-

liam E. Cox, WR July/Aug. 94, p476-484. Surface Water Withdrawal Permits Programs for Humid Regions, J. Wayland Eheart, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and

Harry N. Tuvel, ed., 1994), p529-532.

Riparian waters

The Regulation of Lake Ontario During the Spring of 1993; a Period of Record Supplies, Anthony J. Eberhardt and Peter P. Yee, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p187-191.

Riparian Wetlands and Flood Stages, F. Douglas Shields, Jr. and Charles M. Cooper, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p351-355.

Width Adjustment: Relative Dominance in Unstable Alluvial Streams, Andrew Simon, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p974-978.

Damage Mechanisms and Influence of Gradation for Steep Riprap, Karol Rohan, Mahrez Ben Belfadhel, Oscar Dascal and Guy Lefebvre, GT Mar. 94, p514-527.

Field Performance and Analysis of Steep Riprap, Guy Lefebvre, Karol Rohan, Mahrez Ben Belfadhel and Oscar Dascal, GT Sept. 92, p1431-1448.

Measurements of the Hydrodynamic Lift and Drag Forces Acting on Riprap Side Slope, A. F. Ahmed and F. S. El-Gamal, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p331-340.

Protection Against Scour at SAF Stilling Basins, Charles E. Rice and Kem C. Kadavy, HY Jan. 93, p133-139.

Riprap Criteria below Pipe Outlet, Mahmood Shafai-Bajestan and Maurice L. Albertson, HY Feb. 93, p181-200

Riprap Sizing for Modified ARS-Type Basin, Steven R. Abt, Glenn B. Hamilton, Chester C. Watson and John

Smith, HY Feb. 94, p260-267.
Sandstone Materials Used as Riprap, Steven R. Abt, Mitchell R. Peters, Terry L. Johnson and Scott A. Hogan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p467-471.

Toe Scour Protection Methods, Stephen T. Maynord, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1035-1039.

Interpretive and Modelling Problems of Risk and Uncertainty in Bidding Techniques, David Eaton, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p2038-2045

Managing Uncertainty in Project Planning and Execution: Introduction and Overview, Guru N. Rao, Francois Grobler and Liang Y. Liu, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p33-40.

A PC-Based Stochastic Project Scheduling and Costing Module, Kamalain K. Sha'ath and Gurdev Singh, (Computing in Civil Engineering, Khalil Khozeimeh, ed.,

1994), p9-16.

Risk Variability from Uniform Soil Remediation Goals for PCBs, Paula A. Labieniec, David A. Dzombak and Robert L. Siegrist, EE May/June 94, p495-512.

Severity Measures in Side-Impacts with Narrow Roadside Structures, M. H. Ray, J. F. Carney, III, M. I. Faramawi and L. A. Troxel, TE Mar./Apr. 94, p322-338.

Toward Integrated Design of Waste Management Technologies, Sam A. Carnes and Amy K. Wolfe, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p267-274.

Risk acceptance

Advertising Public Outreach: Going Where the People Are, Douglas Bradford and Daniel Burns, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p76-82. Sharing the Risk, Candace Port-Hull, WP Special issue 94,

p14-19.

Training for Effective Public Outreach: A Model for Transportation Risk Communication Training, Judith Holm, Kathie Reed and Dick Tardif, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p83-87.
Urban Versus Rural Risk Perception Relating to High-Level Nuclear Waste, Dennis L. Soden, (High Level Ra-dioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p136-141.

Risk allocation

The Contractor-Subcontractor Relationship: The Subcontractor's View, Jimmie Hinze and Andrew Tracey, CO June 94, p274-287.

Analyses of Releases Due to Drilling at the Potential Yucca Mountain Repository, R. W. Barnard, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1292-1297

Analysis and Evaluation of Alternative Technologies, Simaan M. AbouRizk, Srinivasa R. Mandalapu and Miroslaw Skibniewski, ME May/June 94, p65-71.

Bayes' Theorem and Quantitative Risk Assessment, Stan Kaplan, (Risk-Based Decision Making in Water Re-sources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p186-193.

Behavioral, Social, and Institutional Aspects of Risk Analysis, Richard C. Schwing, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p340-341. Civilian Structures: Taking the Defensive, Paul Wei-dlinger, CE Nov. 94, p48-50.

Climate Change, Jim Lambert, (), p352-354.

Computer Implementation of Fuzzy Reasoning in Tendering, C. M. Tam, K. C. Lam and Albert T. P. So, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1357-1364.

Computer Software for Risk Analysis, Walter M. Grayman, (), p350-351.

Computer-Based Risk Assessment of Competitive Procurement, Larry G. Crowley, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1540-1547.

Control of Disinfection By-Products in Drinking Water, Philip C. Singer, EE July/Aug. 94, p727-744.

Cultivating Stakeholder Interaction in Emergency Management, Wallace J. Weaver and Loretta F. Brownell, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p188-192.

Decision-Making Paradigm for Risk Assessment of Hazardous Wastes Using Fuzzy Sets, Timothy Ross, Joseph Trumm and Sunil Donald, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p200-207.

Developments in Risk Analysis Commercial Software, Charles Yoe, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p243-262.

Does Current Cancer "Risk Assessment" Harm Health? Bruce N. Ames, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard

Holme, ed., 1994), p121-122.

Environment-Irrigation Trade-Offs and Risks, Norman J. Dudley, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p280-294

EPA's Regulatory Process: A New Way of Doing Business, Tudor T. Davies and Timothy J. Kasten, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p123-

Evaluating an Autoregressive Model for Stream Flow Forecasting, Yuan Cheng, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1105-1109.

Evaluating Risk of Extreme Events for Univariate-Loss Functions, James H. Lambert and Duan Li, WR May/

June 94, p382-399.

Federal Risk Management Policy: Where Are the Problems? Anthony J. Thompson, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p1-18.

Federal Risk Management Policy: Where Is the Federal Government Heading? Where Are the Problems? Jonathan W. Bulkley, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p331-337.

Flood Loss Assessment with Integrated Measures, Yacov Y. Haimes, Duan Li, Vijay Tulsiani, Eugene Z. Stakhiv and David Moser, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p219-233. A Framework for the Environmental Risk Assessment of

Contaminated Sediments, Tom M. Dillon, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p141-149.

High-Burnup/Low Cooling-Time Fuel Carrying Capacity of the GA-4 and GA-9 Spent Fuel Shipping Casks, J. K. Boshoven and J. E. Hopf, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p913-917.

Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani,

ed., 1994, 0-7844-0046-6, 808pp.

The Importance of Hurricane Risk Assessment in Housing and Improved Design and Building Practice Therein, Desmond Imbert, Patrick Drakes and David Prevatt, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p684-695.

Improvements to the Clean Water Act and Related Statutes, Howard Holme, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p233-257.

Influence of a Sand Layer on Headcut Advance, Kerry M. Robinson and Gregory J. Hanson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p431-435. Integrating Computer Applications for Traffic Data Analysis, Patricia B. Noyes and Pete d'Oronzio, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1339-1342.

Jury Verdict: Frequency versus Risk-Based Culvert De-sign, Gary L. Lewis, WR Mar./Apr. 92, p166-184.

A Knowledge-Based Computer System for Financial Wind Risk Management, Auguste C. Boissonnade and Surya K. Gunturi, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p2191-2198.
Linguistic Analysis of Risk in Project Planning, Roozbeh Kangari and Moataz Bakheet, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p216-219.

Managing Uncertainty in Environmental Remediation Project Planning, Guru N. Rao and Francois Grobler, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p208-215.

Measuring the Benefits of Flood Risk Reduction, Leonard Shabman, (Risk-Based Decision Making in Water Re-sources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p122-135.

Methods for Risk and Reliability Analysis, Larry W. Mays, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p26-44.

Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994, 0-

7844-0035-0, 375pp.

The MOUSE Uncertainty Analysis System, Albert J. Klee, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p372-379.

Policy Issues of Transporting Spent Nuclear Fuel by Rail,
H. Barry Spraggins, (High Level Radioactive Waste
Management, High Level Radioactive Waste Program Committee, 1994), p163-167.

Poorer Is Riskier: Opportunity for Change, Richard C. Schwing, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p102-121.

Preface and Executive Summary, Howard Holme, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p1-14.

Privatization risks, WP Spring 94, p4.

Protecting Human Health: Keeping Science in Risk Assessment and Balance in Risk-Based Regulations, Robert G. Tardiff, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p96-106.

Public Perceptions of Fresh Water Issues, Robert E. O'Connor, Richard J. Bord and Ann Fisher, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv,

ed., 1994), p155-174.

Purpose and Perspective for the Conference: "National Water Resources Regulation - Where is the Pendulum Water Resources Regulation - Whitel's the Fendulum Now?", Jonathan E. Jones, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p15-19.

Railroad Accident Probability Model, Phillip Fanchon and the Company of the Park of the Pa

H. Barry Spraggins, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p666-670.

Range Estimating -- User-Friendly Risk Analysis, Kevin M. Curran, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p47-54.

Reliability-Based Pier Scour Engineering, Peggy A. John-

son, HY Oct. 92, p1344-1358. Risk Analysis: Wet Weather Flows in S.E. Michigan, Jonathan W. Bulkley, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser,

ed. and Eugene L. Stakhiv, ed., 1994), p89-101. Risk and Reliability of Water Resources Infrastructure and Engineering Approaches to Risk and Reliability Analysis, Richard Males, (Risk-Based Decision Making in Mater Resources VI, Yacov Y, Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p338-339.

Risk Management in Wellhead Protection, David A. Chin and Prasad V. K. Chittaluru, WR May/June 94, p294-315.

Risk of Extreme and Catastrophic Events, Jim Lambert, (), p345-347.

Risk Simulation Model for Rehabilitation Studies, Richard Males, David Moser, Michael Walsh, Walter Grayman and Craig Strus, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p274-279.

Risk Variability from Uniform Soil Remediation Goals for PCBs, Paula A. Labieniec, David A. Dzombak and Robert L. Siegrist, EE May/June 94, p495-512.

Risk-Based Analysis for Flood Damage Reduction, Darryl W. Davis and Michael W. Burnham, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p194-200.

Risk-Based Budgeting for Maintenance Dredging, Michael R. Walsh and David A. Moser, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994),

p234-242.

Risk-Based Decision Making in Water Resources VI, ISSN: 1063-5076, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994, 0-7844-0032-6, 381pp.

Risk-Based Environmental Priorities: What Priority? E. Donald Elliott and Alan B. Horowitz, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p24-33.

Safety Assessment of a Chemical Reactor Vessel, A. Wiedermann, A. Longinow and F. Calabrese, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1-6.

Strategies for Avoiding Civil Liability, Robert W. Day, El July 94, p265-269.

Subjective De-Biasing of Data Sets: A Bayesian Approach, M. Elisabeth Paté-Cornell, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A Moser, ed. and Eugene L. Stakhiv, ed., 1994), p175-185.

A Theoretical Framework for Risk Assessment, George Apostolakis, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p82-88.

Uncertainty versus Computer Response Time, William D. Rowe, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p263-273.

Water Infrastructure Risk Ranking and Filtering Method, Tomas Dolezal, Yacov Y. Haimes and Duan Li, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Sta-

khiv, ed., 1994), p56-72.

When and How Can You Specify a Probability Distribu-tion When You Don't Know Much? Yacov Y. Haimes, Timothy Barry and James H. Lambert, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p19-25.

Risk management

Assessing Fitness for Purpose of Offshore Platforms. II: Risk Management, Maintenance, and Repair, H. Banon, ST Dec. 94, p3613-3633.

The Assessment of Future Human Actions at Radioactive Waste Disposal Sites: An International Perspective, D. R. Anderson, D. A. Galson and E. S. Patera, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1286-1291.

Contractors' Construction-Claims Avoidance, George Jergeas and Francis T. Hartman, CO Sept. 94, p553-560.

Demonstrated Success in Reducing Risk of Losses in a Severe Hurricane: Hurricane Omar Experience, Juan C. Tenorio and Jack B. Jones, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p716-725.

Flood Control vs. Flood Management, Philip A. Williams, CE May 94, p51-54.

A Knowledge-Based Computer System for Financial Wind Risk Management, Auguste C. Boissonnade and Surya K. Gunturi, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2191-2198.

Linguistic Analysis of Risk in Project Planning, Roozbeh Kangari and Moataz Bakheet, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p216-219.

Reducing the Risks of Severe Windstorm Disaster; an International Perspective, Alan G. Davenport, (Hurricanes of 1992: Lessons Learned and Implications for the Fu-ture, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p147-157.

Risk Management Strategies for Natural, Manmade, and Technological Hazards, Steven R. Cone, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p342-344.

Risk Management Strategies for Natural, Manmade, and Technological Hazards, Benjamin F. Hobbs, (), p348-

Risk-Based Management of Uncertainty During Project Planning and Execution, Angel L. Rivera and Juan J. Ferrada, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p384-389.

Sharing the Risk, Candace Port-Hull, WP Special issue 94,

Using A Risk-Based Relative Position Analysis to Initiate Water Conservation Measures, Chris Basford and Ron Harris, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p810-813.

Dieke

Economic Risk Analysis of Building Codes, James D. En-glehardt, Chengjun Peng and Ahmad Namini, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p674-683.

Knowledge-Based System for Wind Damage to Buildings Kishor C. Mehta, Douglas A. Smith and Ronald H. Cheshire, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p726-735.

Oil and Gas Exploration Near Yucca Mountain, Southern Nevada, John A. Grow, Charles E. Barker and Anita G. Harris, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1298-1315.

Scenario Development for the Waste Isolation Pilot Plant: Building Confidnece in the Assessment, Daniel A. Galson and Peter N. Swift, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1350-1357.

Some Lessons from Australian Experience, George R. Walker, (Hurricanes of 1992: Lessons Learned and Imolications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p249-258.

Standards for High Level Radioactive Waste Repositories, Dade W. Moeller, Martin J. Steindler, Paul W. Pomeroy and William J. Hinze, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

River basin development

Committee, 1994), p1417-1421.

Channel Stabilization and Retrofit, Ken Nilsen, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p718-721.

Integration of Water Quantity and Quality Planning, Luiz G. Azevedo, Timothy K. Gates and Darrell G. Fontane, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p388-391.

Integration of Water Rights and Salinity Considerations in Comprehensive River Basin Management, Ralph A. Wurbs, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p396-399.

Addressing Central Valley Project Policy Issues Using a General-Purpose Model, Jean M. Boyer, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p509-512.

Bridge Scour During the 1993 Floods in the Upper Mississippi River Basin, Gordon G. Barksdale, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p21-25.

Construction Kit for V. Sual Programming of River-Basin Models, René F. Reitsma, Andrew M. Sautins and Stephen C. Wehrend, CP July 94, p378-384.

Estimation of Spillway Free Jet Trajectory Lengths, Peter J. Rae and Diana Hurdowar-Castro, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p421-425.

Finite-Volume Two-Dimensional Unsteady-FLow Model for River Basins, D. H. Zhao, H. W. Shen, G. Q. Tabios, III, J. S. Lai and W. Y. Tan, HY July 94, p863-883.

Frequency of the 1993 Flood in the Upper Mississippi River Basin, W. O. Thomas, Jr. and D. A. Eash, (Hy-draulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p16-20.

A Gaming Analysis of Drought-Coping Policy Options, James L. Henderson, William B. Lord and Russell L. Gum, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel,

ed., 1994), p620-623.

Integrated Planning for International River Basin, Alvin S. Goodman, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p130-

Integration of Water Quantity and Quality in River Basin Network Flow Modeling, John W. Labadie, Darrell G. Fontane and Tewai Dai, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p61-64.

A New Formula for Mean Velocity in Torrents, Hanspeter Hodel and Isidor Storchenegger, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer,

ed., 1994), p667-671.

Predicting Hydrologic Impacts of a Severe and Sustained Drought on the Colorado River Basin, Taiye B. Sangoyomi and Benjamin L. Harding, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p616-619.

PROSIM - A Water Rights-Based Operational Simulation Model of the Provo River, Steven M. Thurin, Paul C. Summers and P. Kirt Carpenter, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p578-581.

Reusable Water Exhange Modeling, John R. Clark and John N. Winchester, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p738-741.

Water Balance of Blue Nile River Basin in Ethiopia, Peggy A. Johnson and P. Douglas Curtis, IR May/June 94, p573-590.

Bias in Regression Estimates of Manning's n, Kenneth L. Wahl, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p727-731.

Cleanup of a Coal Tar Deposit Using a Vacuum Clam, B. G. Bennett, I. K. Hill and A. Z. Erzinclioglu, (*Dredging* '94, E. Clark McNair, Jr., ed., 1994), p991-1000.

Delineating Limits of Remediation for Heavy Metal Contaminated Sediments in River and Cove Areas, Gregory P. Matthews and Thomas M. Simmons, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1240-1249.

Flow Velocity Profiles in Gravel-Bed Rivers, Vito Ferro and Giorgio Baiamonte, HY Jan. 94, p60-80.

Flow-Bed Interaction and Energy Loss in Torrents, Luis Ayala and Alejandro López, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p687-691.

Hydrodynamics of Mining Pits in Erodible Bed under Steady Flow, Mohammad Akram Gill, HY Nov. 94, p1337-1348.

Monitoring and Modeling the Transport of Coarse Single Particles in Mountain Rivers, Peter Ergenzinger and Carmen de Jong, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p634.

Pilot-Scale Demonstrations of Thermal Desorption for the Treatment of Contaminated River Sediment, B. Thomas Kenna, David Conboy, Judith Leithner, Daniel Averett and Stephen Yaksich, (Dredging '94, E. Clark McNair,

and Stephen 1, 17, ed., 1994, p. 74-48. Roughness Coefficient in Mountain Rivers, Alfonso Ugarte and Manuel Madrid, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p652-656.

Some Benefits of Grid by Number Sampling, David Crowder and Panayiotis Diplas, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p795-799.

Comparison of Current Meters Used for Stream Gaging, Janice M. Fulford, Kirk G. Thibodeaux and William R. Kaehrle, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p376-385.

Flow and Sediment Transport at River Diversions, Yalin Wang, Brian Barkdoll and A. Jacob Odgaard, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph

R. Rumer, ed., 1994), p1060-1064.

Flow-Measurement Structures of Compound Cross Section for Rivers, Mustafa Gögüs and Dogan Altınbilek, IR

Jan./Feb. 94, p110-127.

Hydraulic Model Readies River for 1996 Olympics, CE

Mar. 94, p26.

Long Term Predictability of River Stages under ENSO Influence, Juan B. Valdés, Dara Entekhabi and Paolo Bartolini, (Hydraulic Engineering '94, George Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p366-

Multicomponent-Flow Analyses by Multimode Method of Characteristics, Chintu Lai, HY Mar. 94, p378-395.

Neural Networks for River Flow Prediction, Nachimuthu Karunanithi, William J. Grenney, Darrell Whitley and

Ken Bovee, CP Apr. 94, p201-220.

Operational Interactive Hydrologic Forecasting with the National Weather Service River Forecast System, Donna Page and George F. Smith, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p1-4.

A Satellite Based River Forecast System for the Nile River, Victor Koren and Curtis B. Barrett, (Water Policy and Management: Solving the Problems, Darrell G. Fontane,

ed. and Harry N. Tuvel, ed., 1994), p9-12.

The Variability of Large Alluvial Rivers, Stanley A Schumm, ed. and Brien R. Winkley, ed., 1994, 0-7844-0054-7, 467pp.

River regulation

Farakka Barrage - It's Impacts and Possible Mitigation, M. Asafuddowlah and Sufian A. Khondker, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p120-124.

Impacts of Low Flows on the Alluvial Rivers of the Southwest Region of Bangladesh, Daryl B. Simons, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p125-129.

Design and Execution of Hydrodynamic Field Data Collection using Acoustic Doppler Current Profiling Equipment, Timothy L. Fagerburg and Thad C. Pratt, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p530-538.

Effects on River Mechanics Due to Reduction in Low-Season Discharge, E. V. Richardson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p115-119.

Ice Accumulation Rate and the Geometry of Ice Jams in River Bends, Gilberto E. Urroz and Robert Ettema, (Hy-draulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p386-390.

1993 Ground-Water Flooding in the Havana Area, Adrian P. Visocky, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p608An Alternative Equation for the Mean Velocity in Gravel-Bed Rivers and Mountain Torrents, Dieter Rickenmann, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p672-676.

Analysis of blocking phenomena in bifurcated channels found in mountainous rivers, Kazuyoshi Hasegawa and Toshinao Mizugaki, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p829-833.

Analysis of Levee Design in a Mountain River Using Two-Dimensional Flow Modeling, Diane M. L. Mas, Andrew J. Miller, James A. Smith and Wei-hao Chung, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p757-761.

Analysis of the Causes and Triggering Events of Disastrous Torrent Flood, Milivoje Brajković and Zoran Gavrilović, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p640-644.

Analysis of the Torrent Lava Flow Movement and Its Computations - One Example Applied Investigation of Disas-trous Torrent Flood, Zoran Gavrilović, (*Hydraulic Engi-neering* '94, George V. Cotroneo, ed. and Ralph R. Ru-mer, ed., 1994), p650-651.

An Approach to the Calculation Method of Mean Sediment Size, Yingyan Chen and Huilin Zhao, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p805-809.

At-A-Site Mountain River Flow Resistance Variation, James C. Bathurst, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

Bed Load Prediction in Steep Mountain Rivers, Tamotsu Takahashi and Toyoaki Sawada, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p810-814.

The Bladensbug Marina Revitalization Project, Wesley R. Johnson and Kevin H. Deis, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p439-448.

Boundary Conditions and Flow Patterns in a Mountain River, Andrew J. Miller, Diane M. L. Mas, James A. Smith and Wei-Hao Chung, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p762-766.

Characterization of Incised Channel Development, Chester C. Watson, Daniel Gessler and Ronald R. Copeland, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p969-973.

Chezy Formula Versus Theory and Common Sense, Witold Gustaw Strupczewski, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p662-666.

Chicago River Navigation Study, Michael A. Kraman, Nicholas Pansic and Vedat Demirel, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p321-332.

Clear-Water Scour around Bridge Pier Group, Nandana Vittal, U. C. Kothyari and Morteza Haghighat, HY Nov. 94, p1309-1318.

Computation of Transverse Mixing In Streams, Alexander C. Demetracopoulos, EE May/June 94, p699-706.

Contraction Scour at a Bridge over the Iowa River, Edward E. Fischer, (Hydraulic Engineering '94, George V Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p31-35.

A Coupled GIS-Water Quality Modeling System, Chen-Yu Cheng, J. F. Atkinson and J. V. DePinto, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p247-251.

Critical and Supercritical Flows in two Unstable, Mountain Rivers, Toutle River System, Washington, Andrew Simon and J. H. Hardison, III, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p741-745.

Development of Long-Term Three-Dimensional Hydrody-namics in Long Island Sound for Use in Water Quality Modeling, Richard A. Schmalz, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Runeering '94, George V. Cotro mer, ed., 1994), p1316-1320.

Discharge-Frequency Relationships in Distributary Flow Systems, Edward R. Mifflin, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1085-1089.

East River Modeling of Water Quality for Multiple-Project Assessments, Guy Apicella, Robert Norris, Johanna Newton, Walter Ewald and Angelika Forndran, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p235-248.

Effect of Pier Geometry on Scour in Graded Gravels, Luis Ayala and Francisco Grandón, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

57., October V. Cotroneo, ed. and Raiph R. Rumer, ed., 1994), p73-77.
Energy Losses in Steep Tributary Streams at Flows Near The Threshold of Bedload Entrainment, Matthew D O'Connor, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p778-770.

Equilibrium Geometry of Channels with Cohesive Banks, R. G. Millar and M. C. Quick, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p964-968.

Erosion and Deposition by Debris Flows in Mountainous Channels on North Fork Mountain, Eastern West Virgin-Chambels on Fouri Fork Mountain, Eastern Wess Viginia, Daniel A. Cenderelli and J. Steven Kite, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p772-776.

Estimating Local Bed Shear Stress in Large Gravel-Bed

Rivers, Peter R. Wilcock, Alan F. Barta and Conor C. C. Shea, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p834-838.

ed. and Raph R. Rumer, ed., 1994), p834-838. Evaluating Flow Resistance Using Height of Roughness Protrusions, Ivana Marešová, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p712-716.

Expansion and Contraction of Powder River Between Moorhead and Broadus, MT: Geomorphic Observations and Numerical Modeling, James E. Pizzuto, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p984-988

Expert Analysis in Regulated Irrigation Canal Modelling, Forrest M. Holly, Jr. and John P. Parrish, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p92-96.

Field Measurements of Secondary Currents in Straight Rivers, Iehisa Nezu, Akihiro Tominaga and Hiroji Naka-gawa, HY May 93, p598-614.

Flow and Chloride Transport in the Tidal Hudson River, NY, Lawrence A. Weiss, Raymond W. Schaffranek and M. Peter de Vries, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1300-1305.

Flow patterns in a mountain stream, Lisa C. Hubbard and Colin R. Thorne, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

p737-741.

Flow Resistance of High-Gradient Gravel Channels, R. G. Millar and M. C. Quick, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p717-721.
Flow-Bed Interaction and Energy Loss in Torrents, Luis Ayala and Alejandro López, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p687-691.

Fluvial Hydraulics of Streams and Mountain Rivers with Mobile Bed, Wojciech Bartnik and Alicja Michalik, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p767-771.

A General Theory of Channel Adjustment in High Gradi-

ent Streams, Gordon E. Grant, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p817-818.

HEC River Analysis System (HEC-RAS), Vernon Bonner, Gary Brunner and Mark Jensen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p376-380.

Historic-Flood Evaluation and Research Needs in Mountainous Areas, Robert D. Jarrett, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), P875-879.

Hocking River Sedimentation Study, Jon B. Fripp, Kenneth C. Halstead and Surya Bhamidipaty, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1120-1124.

Hydraulics and Sediment Transport Processes in a Pool-Riffle Rocky Mountain Stream, Douglas M. Thompson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p849.

Impacts of Natural and Manmade Changes on the San Luis Rey River Environment, Chenchayya T. Bathala and W. Jeffery Moncrief, (Water Policy and Management: Solv-ing the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p327-330.

Improved Hydraulic Features of the HEC River Analysis (HEC-RAS), Gary W. Brunner and Steven S. Piper, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p502-506.

Innovative Instrumentation for a Physical Model of River Ice Transport, Johannes Larsen, Jon E. Zufelt and Randy D. Crissman, (Fundamentals and Advancements in Hy draulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p259-267.

Integration of Water Rights and Network Flow Modeling in the Upper Snake River Basin, Donald K. Frevert, John W. Labadie, Roger K. Larson and Nancy L. Parker, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

p577.

550

Kent, Edward, John Richardson and Vijay Panchang, (Hy draulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p56-60.

Luo, Ming, Weilin Xu and Huasheng Liao, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1009-1013.

Management of Sediments on the Red River Waterway Project, Phil G. Combs, C. Fred Pinkard, Jr., William H. Espey, Jr. and Ben Littlepage, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1125-1130.

Mathematical Models to Assess Stream Dynamics, Laura Bittner, Yarko Niño and Marcelo García, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p391-395.

Monitoring Gravel Movement Using Radio Transmitters, Edward F. Chacho, Jr., William W. Emmett and Robert L. Burrows, (Hydraulic Engineering '94, George Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p785-789

A new approach for the estimation of extreme roughness in new approach for the estimation of exactine roughness in torrents by Hydraulic and Photogrammetry, Hanspeter Hodel, Thomas P. Kersten and Isidor Storchenegger, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p697-701.

Numerical Model Verification on Tidal Current in Tokyo Bay, Yoshitaka Fukui, Toshio Kodama and Mutsuto Kawahara, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p880-

On Habitat Simulation in Mountain Rivers, Robert T. Milhous, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p850-

On the Erodibility of Rock and Other Earth Materials, George W. Annandale and Hendrik A. D. Kirsten, (Hydraulic Engineering) '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p68-72.

Palaeohydraulic reconstruction of floods in upland UK bedrock streams: progress, problems and prospects, Paul A. Carling, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p860-

Particle Dynamics and Bed Level Adjustments in a Mountain Stream, Paul A. Carling, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p839-843.

A Physically-Based Model of Channel Widening, Stephen E. Darby and Colin R. Thorne, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), 944-948.

Quasi-Two Dimensional Modelling of Flood Routing in uasi-1wo Dimensional Modelling of Flood Roberts, E. Rivers and Flood Plains by Means of Storage Cells, E. Bladé, M. Gómez and J. Dolz, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro,

ed. and Luigi Natale, ed., 1994), p156-170.

Reconstruction of Concentration Boundary Condition for Unsteady Pesticide Transport Modeling, Deborah J. Mossman and Nael Al Mulki, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p160-164.

1993, p100-103.

The Regulation of Lake Ontario During the Spring of 1993; a Period of Record Supplies, Anthony J. Eberhardt and Peter P. Yee, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p187-191.

Relation of Unit Gravel Discharge to Mean Velocity, Lilian Posada-G and Carl F. Nordin, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer,

ed., 1994), p1050-1054.

Reservoir Sediment Removal: Hydrosuction Dredging, Rollin H. Hotchkiss and Xi Huang, (Hydraulic Engi neering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1020-1024.

Riparian Wetlands and Flood Stages, F. Douglas Shields, Jr. and Charles M. Cooper, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p351-355.

The Role of Partnering and Public Involvement in the Lackawanna River Corridor Greenway Study, Robyn S. Colosimo, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p453-456.

Roughness Coefficient in Mountain Rivers, Alfonso Ugarte and Manuel Madrid, (Hydraulic Engineering George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p652-656.

Salinity and Dissolved-Oxygen Dynamics in a Wind-Driven Estuary, Jerad D. Bales and R. G. Garrett, (Hy-draulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1311-1315.

Sandbar Formation in Side-Diversion Channels, Vincent Neary, Brian Barkdoll and A. Jacob Odgaard, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1171-1175.

Sediment Feed and Recirculating Flumes: Fundamental Difference, Gary Parker and Peter R. Wilcock, HY Nov.

93, p1192-1204.

Sediment Modeling in the Rio Grande Conveyance Channel, Drew C. Baird and Cassie C. Klumpp, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1151-1155.

Size Characteristics of Debris Flow Deposition, Huilin Zhao and Yingyan Chen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p777.

Some Benefits of Grid by Number Sampling, David Crowder and Panayiotis Diplas, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p795-799.

Steep Constructed Stream Channels and Chutes, Kenneth R. Wright, F. Robert McGregor and Gary Lacy, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p657-661.

Step Pool Geometry and Flow Characteristics in Low-Sediment-Storage Channel Beds, Tamir Grodek, Moshe Inbar and Asher P. Schick, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p819-823. Step-Pool Streams: An Adjustment to Maximum Flow Re-

sistance, Athol D. Abrahams, Gang Li and Joseph F. At-kinson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p815-

Stot.

Stratified Flow in an Impounded Inland River, Emmet M.

Owens and William R. Naumann, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p569-573.

Structure of River Turbulence Behind Warm Water Discountered to the Company of the Compa

charge, Vladimir I. Nikora, Paweł Rowiński, Aleksander Suchodolov and Dariusz Krasuski, HY Feb. 94, p191Study of Friction Factors in the Upper Reaches of the Rio Grande, Cassie C. Klumpp and Drew C. Baird, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p702-706.

Subsurface Transport Modeling of the Savannah River and Yucca Mountain Sites, Bryan E. Dunlap, Darrell W. Pepper and Dale E. Stephenson, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p1848-1853.

Temporal and Spatial Variations of Suspended Sediment Concentration during Navigation Traffic in a Natural River, Renjie Xia, Ta Wei Soong and Nani G. Bhowmik, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1131-1135.

Theoretical study of unstable waves in the rapids of the river, H. Kyotoh, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

p1265-1269.

Theoretically-Derived Regime River Width, Pierre Y. Julien, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p949-953.

Thermo-Hydrodynamic Modelling of the Chicago Sanitary nermo-Hydrodynamic Moderling of the Chicago Saintary and Ship Canal, Ejaz Mohammad and Forrest M. Holly, Jr., (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1306-1310.

Thresholds for Gravel and Cobble Motion, Katherine J. Chase, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p790-

Turbulence Measurements in Open-Channel Flows over Artificial Bed Forms, D. A. Lyn, HY Mar. 93, p306-326.

Turbulent Velocities in a Mountain River, Graeme M. Smart, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p844-

Use of HEC-2 and HEC-6 to Determine Levee Heights and Revetment Toe Scour Depths, David T. Williams and David Cozakos, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1075-

Using the SedBed Monitor to Measure Bed Load, Roger A. Kuhnle and Robert W. Derrow, II, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p129-138.

The Variability of Large Alluvial Rivers, Stanley A. Schumm, ed. and Brien R. Winkley, ed., 1994, 0-7844-

0054-7, 467pp.

Water Quality Enhancement Technology for River-Reservoir Systems, John S. Gulliver and Steven C. Wilhelms, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1331-

Rivets

Cyclic Performance of Riveted Connections, Roberto Leon, Gabriel P. Forcier, Charles W. Roeder and F. Robert Preece, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1490-1495.

Road construction

Depressing Traffic Top-Down, Dan Burroughs, Shyi-Shyong Jiang and Henrie Henson, CE Jan. 94, p62-64.

The Use of By-Product Gypsum in Road Construction: a State-of-the-Art Summary, Ramzi Taha, Tom Papagian-nakis, Roger Seals and Donald Saylak, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p170-177.

Road curves

Geometric Design of Compound Horizontal Curves, B.K. Roy, TE July/Aug. 94, p674-683.

Unified Design of Horizontal Circular Curves, Said M. Easa, TE Jan./Feb. 93, p94-110.

Evaluating Roadside Hazards Using Computer-Simulation Model, Paul deLeur, Walid Abdelwahab and Francis Na-vin, TE Mar./Apr. 94, p229-245.

Geometric Characterization of Road Humps for Speed-Control Design, T. F. Fwa and L. S. Tan, TE July/Aug. 92, p593-598.

GIS Modeling of Neo-Traditional Neighborhood Development, John R. Stone, Thomas H. Wittmann and Jonathar Boone, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p1131-1138. The Safety Advisor: An Interactive Object-Oriented Program for Assessing the Safeness of Roadway and Road-side Designs, Malcolm H. Ray, (Computing in Civil En-gineering, Khalil Khozeimeh, ed., 1994), p341-348.

Road surface roughness

Microsurfacing Urban Pavements, David K. Hein, John J. Emery and Romualdo D'Ippolito, CE May 94, p55-57.

Asphalt Applications for Railroad Maintenance and Con-struction, Jerry G. Rose, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p617-626.

Roads

Geometric Characterization of Road Humps for Speed-Control Design, T. F. Fwa and L. S. Tan, TE July/Aug. 92, p593-598.

Geometric Design of Compound Horizontal Curves, B.K. Roy, TE July/Aug. 94, p674-683.

Pen Computers in Civil Engineering, Don M. Newell, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1631-1638.

Polystyrene Blocks Support Sinking Roadway, CE Oct. 94,

Privatization risks, WP Spring 94, p4.

The Road is Tired, ET Apr./May 94, p11.

Roadside hazards

Roadside Hazards Using Computer-Simulation Model, Paul deLeur, Walid Abdelwahab and Francis Na-vin, TE Mar./Apr. 94, p229-245.

The Safety Advisor: An Interactive Object-Oriented Program for Assessing the Safeness of Roadway and Roadside Designs, Malcolm H. Ray, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p341-348.

Severity Measures in Side-Impacts with Narrow Roadside Structures, M. H. Ray, J. F. Carney, III, M. I. Faramawi and L. A. Troxel, TE Mar./Apr. 94, p322-338.

Test and Evaluation Criteria for Side-Impact Roadside Ap purtenance Collisions, M. H. Ray and J. F. Carney, III, TE July/Aug. 94, p633-651.

Roadside maintenance

A Feature Based Path Planning System for Robotic Stencil-ing of Roadway Markings, H. Kochekali and B. Ravani, (Robotics for Challenging Environments, Laura A. Dem-setz, ed. and Paul R. Klarer, ed., 1994), p52-60.

Advancement of Material Handling Technologies for In-Place Asphalt Pavement Recycling, Sotiris A. Pagdadis and Ilan Ishai, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994).

Application of Virtual Reality to Space Robotics Operations, David A. Read, Ken J. Ruta and Bradley N. Bell, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p19-27.

Automated Post Irradiation Handling of Spent Nuclear Fuel In PNC's FMF-2 Facility Test Hot Cell, Mark H. Price and Thomas R. Frantz, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p358-362. Automation and Robotics Opportunities: Construction Versus Manufacturing, John G. Everett and Alexander H. Slocum, CO June 94, p443-452.

Automation Concepts for In-Situ Waste Containment, Larry Banta and David Martinelli, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p448-456.

Autonomous Navigation for Structured Exterior Environ-ments, J. Bryan Pletta, (Robotics for Challenging Envi-ronments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p79-87.

Bechtel Automated Lift Planning System, Craig Bennett and Steve Ditlinger, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p401-409.

Bubba, A Teleoperated Countermine Vehicle, Dave Hayward, Bryan Pletta, Jerry Clifford and Kerry Habiger, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p464-473.

Computer-Assisted Coal Mining - An Overview, George H. Schnakenberg, Jr., (Robotics for Challenging Envi-ronments, Laura A. Demsetz, ed. and Paul R. Klarer, ed.,

1994), p427-436.

Conceptual Design and Characteristics of A Dual-Arm Cam-Lock Manipulator, Ali Meghdari, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p140-148.

Construction Operations on the OUTPOST Platform in Orbit, Thomas C. Taylor, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p423-432.

Construction Process Innovation Through SMART System, Yusuke Yamazaki and Junichiro Maeda, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1583-1590.

Construction Robot Force Control in Cleaning Operations, Y. Zhou and M. J. Skibniewski, AS Jan. 94, p33-49.

Control Model for Robotic Backhoe Excavation and Obstacle Handling, Xiaodong Huang and Leonhard E. Bernold, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p123-130.

A Decision Support System for Evaluating the Suitability a Robotics System for a Construction Project, Makarand Hastak, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p507-514.

Demands and Satisfiers for Automation and Robotics in Construction: Differences Between Japan and the United States, Hiroshi Saito and John G. Everett, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p419-426.

Developing Plans for Robotic Excavators, Sanjiv Singh, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p88-96.

Drivetrain Design, Incorporating Redundancy, for an Autonomous Walking Robot, Gerald P. Roston and Kevin Dowling, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p184-

Dynamic-Behavior Modeler for Material Handling in Con-struction, Yvan J. Beliveau and Taylan Dal, CP July 94, p269-285.

The Effect of Mobile Transporter Motion on the Space Station Attitude Control System, Tsay-Hsin G. Hu, Jalal Mapar and Ben C. Barker, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p453-462.

Effects of Force Reflection on Telerobotic Performance, Raymond Dick, Terry Faddis and Bill Barr, (Robotics for Challenging Environments, Laura A. Demsetz, ed.

and Paul R. Klarer, ed., 1994), p259-268.

Efficient Path Planning Strategies for Unmanned Rover Vehicles, Kevin K. Gifford and George W. Morgenthaler, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1288-1308.

Enabler Chassis Features and Mobilty Analysis, James S. Hollinger, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p210-219.

The Engineer Vehicle Tele-operation Capability, David J. Busse and Joseph R. Urda, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p474-480.

Environmental Hardening of a Mobile-Manipulator System for Nuclear Environments, Sammy L. Jones, Timothy Cable, James S. Tulenko, Stoyan Toshkov and Fred R. Sias, Jr., (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p296-303.

An Experiment in Mobile Robotic Cooperation, Lynne E. Parker, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p131Feasibility Analysis of Automated Material Handling for Hazardous Waste Remediation, Andrew F. Griffith, Carl T. Haas and Richard L. Tucker, (Robotics for Challeng ing Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p338-346.

A Feature Based Path Planning System for Robotic Stencil-ing of Roadway Markings, H. Kochekali and B. Ravani, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p52-60.

Generalized Object Control and Assembly for Space Ro-bots, Jeff Russakow and Stephen Rock, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p149-157.

Generic Data Acquisition System for Robotic Waste Characterization, John T. Feddema and Barry L. Spletzer, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p320-328.

Goals and Requirements for Scientific Lunar Rovers, Charles Meyer, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p166-174

GPS-Based Control for Space Vehicle Rendezvous, Kurt R. Zimmerman and Robert H. Cannon, Jr., (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p61-69.

Gravitational Wave Astronomy and the Lunar Ligo Con-cept, Norman LaFave and Thomas L. Wilson, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1442-1451.

Houdini: In-Tank Mobile Cleanup Robot, Hagen Schempf, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p286-295

Human Extender: A Material Handling System, H. Kazerooni, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p37-43. Inertially Favorable Trajectories for Robot Motion in

Space, Lyman J. Petrosky and Irving J. Oppenheim, (Ro-Space, Cylinai, Petrossy and riving: Oppendent, oppendent, obsolics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p220-228. Intelligent Construction Planning, A. Warszawski and O. Shaked, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p972-979.
An Intelligent Robotic Vehicle for Lunar/Martian Applications, Fei-Yue Wang, Michael Marefat, Paul J. A. Lever and Larry Schooley, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p193-201.

Interactions Between the Space Station Freedom Attitude teractions between the space Station Freedom Antibude Control System and Space Shuttle Remote Manipulator Controller During On-Orbit Assembly Operations, James T. Kaidy, Jalal Mapar and Ben C. Barker, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p433-452.

The Kinematic Design of a Robotic Large Space Structure Construction Service, Mark R. Routson, Jackson C. Yang and Thomas C. Taylor, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p229-238.

Kinematics of Excavators (Backhoes) for Transferring Surface Material, A. J. Koivo, AS Jan. 94, p17-32

Lunar Base Construction Using the Reinforce Earth Method with Geotextile, Mikiya Okumura, Yasuhiro Ohashi, Takao Ueno, Shojiro Motoyui and Kiosuke Murakawa, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1106-1115.

1994), p.100-1115.

The Lunar Ultraviolet Telescope Experiment (LUTE), John D. Hilchey and Max E. Nein, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p.1431-1441.

Military Robots Revamped for Environmental Duty, CE Dec. 94, p23.

A Mobile Robot for Reconnaissance of HAZMAT Incident Sites, Richard V. Welch, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer,

ed., 1994), p269-277. A Mobile System for the Remote Assembly of Planetary Structures, P. T. Boissiere, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p278-285.

Monitored Retrievable Storage/Multi-Purpose Canister Analysis: Simulation and Economics of Automation, Phil C. Bennett and Joe B. Stringer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p363-369.

Nanorobots Can Explore Planets, Says Researcher, CE May 94, p19.

Navigation of an Autonomous Robot Vehicle, Arturo L. Rankin, David G. Armstrong, II and Carl D. Crane, III, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p44-51.

Navigation of Autonomous Mobile Robots, Georges Blaha and Stephen R. Gerig, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed.,

1994), p70-78.

A New Robotic System Concept for Automating Highway Maintenance Operations, S. E. Winters, D. Hong and S.

A. Velinsky, (), p374-382.

A Novel Gravity Compensation System for Space Robots, H. B. Brown, Jr. and J. M. Dolan, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p250-258.

Onika: A Multilevel Human-Machine Interface for Real-Time Sensor-Based Systems, Matthew W. Gertz and Pradeep K. Khosla, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p28-36.

The Optimal Selection of Robot Modules for Space Manipulators, Robert Ambrose and Delbert Tesar, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p239-249.

An Overview of the Accident Response Mobile Manipulation System (ARMMS), W. D. Morse, D. R. Hayward, D. P. Jones and A. Sanchez, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p304-310.

Planning Intricate Robot Motions to Remove Natural Materials, Sudheer M. Apte and Irving J. Oppenheim, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p106-114.

Real-Time Control for a Robotic Rebar Bender, Phillip S. Dunston and Leonhard E. Bernold, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p392-400.

A Real-Time Control Network for Robotic Mining, William H. Schiffbauer, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p437-447.

Real-time Motion Vision for Robot Control in Unstruc-tured Environments, John Woodfill, Ramin Zabih and Oussama Khatib, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p10-18.

Recent Developments in the Robotic All Terrain Lunar Exploration Rover (RATLER) Program, P. R. Klarer, (Ro-botics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p202-209.

Requirements for Applications of Robotics and Automation in Highway Maintenance and Construction Tasks, B. Ravani, S. A. Velinsky and T. H. West, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p356-364.

Robot for Interior-Finishing Works in Building: Feasibility Analysis, Abraham Warszawski and Yechiel Rosenfeld. CO Mar. 94, p132-151.

Robotic Opportunities for Hazardous-Waste Cleanup, Edward J. Jaselskis and Mary Rose Anderson, EE Mar./ Apr. 94, p359-378.

Robotic Options for Mining of Near-Earth Objects, Russell J. Miller and Robin R. Murphy, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p457-463.

Robotic Rehabilitation of Sewer Infrastructure, R. Laurence Day, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p383-391.

Robotic Workcell for Waste Handling, Gregory P. Starr, Gregory W. Donohoe, David Wilson and Raghu Ko-palle, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p347-355. Robotics and Automation for Environmental Screening and Characterization, Kelly R. Tilford, Edward W Jaselskis, Marvin S. Anderson and Ralph E. Patterson, III, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p329-337.

Robotics for Challenging Environments, Laura A. Dem-setz, ed. and Paul R. Klarer, ed., 1994, 0-87262-913-9,

490pp.

Robots for Earth-and Points Beyond, CE Aug. 94, p8

The Role of Computer Graphics in Teleoperation, Antal K. Bejczy, Won-Soo Kim and Paul S. Schenker, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p1-9.

Sensing and Control for Robotic Masonry, Rami A. Rihani and Leonhard E. Bernold, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer,

stiminens, caud A. Densetz, ed. and Faul R. Katet, ed., 1994, p410-418. Simulation of Autonomous Robotic Excavation, Regis Hoffman and Reid Simmons, (Robotics for Challenging Environments, Laura A. Densetz, ed. and Paul R. Klarer, ed., 1994), p115-122

A Stewart Platform Lunar Rover, Roger Bostelman, James Albus, Karl Murphy, Tsung-Ming Tsai and Ed Amatuc-ci, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p175-183.

- Demsetz, ed. and Paul R. Klarer, ed., 1994), p173-183.

 A Surface Exploration Vehicle Testbed for Real-Time Control Exerimentation, Songiae Lee, R. Michael Brown, Ta-Yu Yuan, Chih-Kang Chao, Dhaval Patel, Gordon K. Lee and Robert B. Kelley, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1333-1344
- Surface Payload Unloading and Deployment Options for a Lunar Return Mission, John Connolly and Larry Toups, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1059-1069.

Tank-Testing Crawlers, ET June/July 94, pl 1.

Three Mile Island Robot Returns to Work, CE Apr. 94, p24-25.

Transferring Construction Technology to the Moon and Back, John F. Connolly and Debra D. Shoots, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994),

URSULA: Design of an Underwater Robot for Nuclear Reactor Vessel Inspection, J. Barry Fallon, Steven B. Shooter, Charles F. Reinholtz and S. William Glass, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p311-319.

Welded Joints for Robotic On-Orbit Assembly of Space Structures, William K. Rule and Frank P. Thomas, AS Apr. 94, p209-224.

Rock bolts

The Application of Thermal Rock Bolts in the Thermal Design of a Nuclear Waste Repository, George Danko, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

Assessment of Rock Bolt Systems for Underground Waste Storage, Wesley T. Leedy and Robert J. Watters, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p691-695.

Shaffer, Thomas F. R. Winston Revie and Anita Mandal, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), n696-704

Rock excavation

A Method for Rock Dredging Performance Forecasting Jorge E. Abramian and R. Bruce Taylor, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p229-238.

Approximating the Imbibition and Absorption Behavior of a Distribution of Matrix Blocks by an Equivalent Spherical Block, Robert W. Zimmerman and Gudmundur S. Bodvarsson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2030-2037.

Construction Monitoring Activities in the ESF Starter Tunnel, John Pott and Scott Carlisle, (High Level Radioac-tive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1993-1998.

Early Detection of Rock Movement with Time Domain Reflectometry, Charles H. Dowding and Fei-Chiu Huang, GT Aug. 94, p1413-1427.

Liquid Infiltration Through the Boiling-Point Isotherm in a Desiccating Fractured Rock Matrix, O. M. Phillips, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2189-2196.

- New Approaches for Determination of Rock and Rock Mass Properties at Dredging Sites, Hardy J. Smith, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p259-
- Statistical Considerations on Large-Scale Geomechanics Test Design For Nuclear Waste Repository Characteriza-tion, Kunsoo Kim and Hang Gao, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1922-1929.

Rock mechanics

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- Following the Geotechnical Studies of the West-Breakwater at Sines; Hydro-Geotechnical Stability of Breakwaters, Frans B. J. Barends and Jack Hagenaar, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p124-167.
- Numerical Modeling of Initial Ground Movement in an In-David B. Spires, Fei Duan and Marek Mrugala, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1990-1996.

Rock properties

- Comparison of Coupled Thermal-Mechanical-Hydrological Analysis of a Fractured Rock Mass, M. P. Ahola, A. H. Chowdhury, S. M. Hsiung and J. Philip, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2492-2499.
- Deformations About Excavations in Highly Stressed Rock, Paul Nash and Garry Mostyn, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1447-1459.
- Development of Stochastic Indicator Models of Lithology, Yucca Mountain, Nevada, Christopher A. Rautman and Thomas H. Robey, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2510-2519.
- In Situ Stress Determination Research Study, William G. Austin and Paul M. Thompson, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-gram Committee, 1994), p2429-2436.
- New Approaches for Determination of Rock and Rock Mass Properties at Dredging Sites, Hardy J. Smith, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p259-
- Novel, Low-Vibration Excavation Techniques for Under-ground Radioactive Waste Storage, Wilhelm J. Kogel-mann, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p417-429.
- Tunnel Boring Machine for Nuclear Waste Repository Research Project, Hans A. Janzon, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p403-410.

Rock strength

A Method for Rock Dredging Performance Forecasting, Jorge E. Abramian and R. Bruce Taylor, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p229-238.

Sandstone Materials Used as Riprap, Steven R. Abt, Mitchell R. Peters, Terry L. Johnson and Scott A. Hogan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p467-471.

Rock structures

The Challenge of Housing the Largest Detector, Prabir Das, C. J. Roth and Nachum Secker, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p755-760.

Field Performance and Analysis of Steep Riprap, Guy Lefebvre, Karol Rohan, Mahrez Ben Belfadhel and Oscar Dascal, GT Sept. 92, p1431-1448.

Further Development of a Source Term Model for a Repos-itory in Unsaturated Tuff, Richard Codell and Richard Weller, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p477-484.

Investigation of Stress in a Circular Tunnel Due to Overburden and Thermal Loading of Horizontally Placed 21 PWR Multi Purpose Canisters, Nadia Kandalaft-Ladkany and Richard V. Wyman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p860-867.

Rockfill structures

Settlement of a 15-Meter Deep Fill Below a Building, Percy M. Wimberly, III, Samuel G. Mazzella and F. Barry Newman, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p398-416.

Wanapum Dam Embankment Settlement Study, M. Gene Yow, Thomas R. Hollingsworth and David D. Moore, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y.

Félio, ed., 1994), p337-347.

Automatic, Remote, Multiplexed Geotechnical Measure-ments with Time Domain Reflectometry (TDR), Charles H. Dowding and Fei-chiu Huang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1220-1227.

A Characterization Study of Fractured Rock, Kenzi Karasaki, Barry Freifeld and Cliff Davison, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2423-2428.

Design of Socketed Drilled Shafts in Limestone, M. C. McVay, F. C. Townsend and R. C. Williams, GT Oct. 92, p1626-1637.

Effective Unsaturated Hydraulic Property Determination with the Renormalization Group Approach: Methodology, Sitakanta Mohanty and Amvrossios C. Bagtzoglou, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2660-2668.

Evidence for a Welded Tuff in the Rhyolite of Calico Hills, Robert P. Dickerson and W. Clay Hunter, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1861-1868.

Excavation Damage and Organic Growth in a 1.2m Diameter Borehole, R. A. Everitt, D. A. Brown, D.M. Boychuk and P. Gann, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2092-2100.

Fracture-Matrix Interaction in Topopah Spring Tuff: Experiment and Numerical Analysis, Robert J. Glass, Vince C. Tidwell, Alan L. Flint, William Peplinski and Yvette Castro, (High Level Radioactive Waste Management, High 1994), p1905-1914.

Investigation of Faulted Tunnel Models by Combined Photoelasticity and Finite Element Analysis, Samaan G. Ladtoelasticity and Finite Exercite Analysis, Samani C. East-kany and Yuping Huang, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1979-1986.

Movement of Foundations on Rock, Ian W. Johnston, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1703-1717.

On the Erodibility of Rock and Other Earth Materials, George W. Annandale and Hendrik A. D. Kirsten, (Hy-draulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p68-72.

Phenomenological Studies of Two-Phase Flow Processes for Nuclear Waste Isolation, Karsten Pruess, Stefan Finsterle, Peter Persoff and Curt Oldenburg, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2639-2647

Preliminary Analysis of Three-Dimensional Moisture Flow Within Yucca Mountain, Nevada, Gudmundur Bodvarsson, Gang Chen and Caroline Wittwer, (High Level Rason, Gang Chen and Caroline Winder, (Figh Lever Rad-dioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2038-2047. Preliminary Investigation Results as Applied to Utilization

of Ukrainian Salt Formations for Disposal of High-Level Radioactive Waste, Stella B. Shekhunova, Oleg I. Petrichenko and Dmitry P. Khrushchov, (*High Level Radio-active Waste Management*, High Level Radioactive Waste Program Committee, 1994), p1880-1885.

Properties of Soundless Chemical Demolition Agents, Jimmie Hinze and James Brown, CO Dec. 94, p816-827.

Radionuclide Release Rates From Natural Analogues of Spent Nuclear Fuel, D. B. Curtis, J. Fabryka-Martin, P. Dixon, R. Aguilar and J. Cramer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2228-2236.

Radionuclides Migration in Fractured Porous Rock: Ana-Automatides Singradon II Fractive Folios Rocks. Amy Hytical Solutions for Various Boundary Conditions, Shih-Hai Li and Shean-Lang Chiou, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p1344-1349.

Stresses in Anisotropic Rock Mass with Irregular Topogra-phy, Ernian Pan and Bernard Amadei, EM Jan. 94, p97-

Ultrasonic Rock Fracture Characterization, G. Danko, G. Zhan, Cs. Mezei, J. Daemen and P. Mousset-Jones, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2789-2796.

Understanding Discrete Fracture Growth in Rock by Interpreting Acoustic Emissions, Steven D. Glaser, (Fracture Mechanics Applied to Geotechnical Engineering, Luis

E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p70-85.
Use of An Analog Site Near Raymond, California, To Develop Equipment and Methods for Characterizing a Po-tential High-Level, Nuclear Waste Repository Site at Yucca Mountain, Nevada, Amjad M. J. Umari, Arthur Geldon, Gary Patterson, James Gemmell, John Earle and Jon Darnell, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2413-2422.

Wave Runup on Smooth and Rock Slopes of Coastal Structures, Jentsje W. van der Meer and Cor-Jan M.

Stam, WW Sept./Oct. 92, p534-550.

Yucca Mountain: A Potential Trade-Off in Radiological Hazards, P. Spiegler, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1959-1963.

Newtonian Fluid Mechanics Treatment of Debris Flows and Avalanches, Bruce Hunt, HY Dec. 94, p1350-1363.

Rocky Mountains

Hydraulics and Sediment Transport Processes in a Pool-Riffle Rocky Mountain Stream, Douglas M. Thompson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p849.

Relation Between Largest Known Flood Discharge and Elevation in Montana, Charles Parrett and Stephen R. Holnbeck, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p870-

Rods

Developing Standardized Connection Analysis Techniques for Slim Hole Core Rod Designs, Gregory Fehr and Ed-mond I. Bailey, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1048-1054.

A Practical Design and Construction of Tension Rod Supported Glazing, Toru Takeuchi, Haruyuki Kitamura, Kimiaki Harada, Kohei Higuchi, Akiho Harada and Mamoru Iwata, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p684-693.

Wave Equation Parameters from Driven-Rod Test, Robert Y. Liang and Yuanjing Sheng, GT June 93, p1037-1057.

Roller compacted concrete

Construction of Akashi-Kaikyo Bridge West Anchorage, Nobuaki Furuya, Reizou Yamaoka and Boyd C. Paulson, Jr., CO June 94, p337-356.

Energy Dissipation for a RCC Stepped Spillway, Charles E. Rice and Kem C. Kadavy, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p548-552.

RCC For Seismic Design, Noel C. Wong, Michael P. Forrest, Sr. and Sze-Hang Lo, CE Sept. 94, p60-62.

Roller-Compacted Concrete, U.S. Army Corps of Engineers, 1994, 0-87262-999-6, 100pp.

Common Causes of Collapse of Metal-Plate-Connected Wood Roof Trusses, Harvey A. Kagan, CF Nov. 93, p225-234.

Performance of Commercial Masonry Structures in Hurri-cane Andrew, Geoffrey W. Blaney, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994),

Performance of Prestressed Concrete Roofs During Hurri-cane Andrew, Wimal Suaris and Mohammed S. Khan,

CF Feb. 94, p16-30.

Statistically-Based Evaluation of Homes Damaged by Hur-ricanes Andrew and Iniki, Jay H. Crandell, Mark T. Gibson, Edward M. Laatsch, Mark S. Nowak and J. Albert vanOvereem, (Hurricanes of 1992: Lessons Learned and

vanovereem, (riurricanes of 1992: Lessons Learnea and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p519-528. Stephenson Structures, Jozsef Bodig and Loren D. Flick, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1004), e577-684.

1994), p677-684.

What Controls the Ultimate Load of a Glulam Dome? S. M. Holzer, S. A. Kavi, S. Tongtoe and J. D. Dolan, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p86-96.

Wind Loads on Roofs of Low Rise Structures: Buffeting or Interaction, Henry W. Tieleman, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p350-361.

Codification of Wind-Pressure Coefficients for Multispan Gable Roofs, Theodore Stathopoulos and Patrick Saathoff, ST Aug. 94, p2495-2519.

St. Louis Complex's Hefty Crown, CE Nov. 94, p14.

Roofing materials

Analysis of Structural Debris Generation and Disposal After Hurricane Andrew: Technical Perspective, Berrin Tansel, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p533-538.

Evaluation of Roof Sheathing Fastening Schedules for High Wind Uplift Pressures, Thomas P. Cunningham, Jr., (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad

Sotani, ed., 1994), p330-339.

Performance of Plywood and OSB Sheathing During Hurricanes Andrew and Iniki, Edward L. Keith, (Hurricanes of 1992: Lessons Learned and Implications for the Fu-ture, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p313-329.

Analysis and Design of a Double Layer Barrel Vault with a Large Span, Ruo Jun Qian and Zu Yan Shen, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p401-408.

Analysis of Glulam-FRP Beams by a Layer-Wise Formulaition, Julio F. Davalos, Youngchan Kim and Somnath S. Sonti, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p67-75.

Causes of Roof Covering Damage and Failure Modes: Inauses of Roof Covering Daimage and Father Roomas Lee sights Provided by Hurricane Andrew, Thomas Lee Smith, (Hurricanes of 1992: Lessons Learned and Impli-cations for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p303-312.

Gable Roofs, Theodore Stathopoulos and Patrick Saathoff, ST Aug. 94, p2495-2519, Combinatary Net-Shell Roofs of Elliptic Paraboloid of

Zhaoqing Gymnasium, Fa-Kun Yao, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p642-

Comparison of Two different Models of a Shell Roof, Oscar A. Andrés, Néstor F. Ortega and Carlos A. Schiratti, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penal-

F. Abel, ed., John W. Leonard, ed. and Cenna U. Fenalba, ed., 1994), p320-329.

Concrete Shells Today, Heinz Isler, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p820-836.

Critique on Building Envelope Sessions, Peter R. Sparks, Ultraviology of 1907. Leavent Leavend and Implications.

(Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p529-532.

Denver International Airport Tensile Roof Case Study: The Fabrication and Construction Process, Martin L. Brown, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed.,

1994), p969-978.

Design and Construction of the Cable-Stayed Wooden Space Truss Roof, Kei Sadakata and Hong Wan, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p810-819.

A Design for a Football Stadium Roof Enabling Growth of a Natural Grass Playing Surface: Sydney Football Stadi-um - Australia, G. S. Ramaswamy, D. S. Thomas, I. Nor-rie and L. Thorogood, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p28-37.

Enter the Dragon, Scott Danielson, CE Nov. 94, p64-67. Evaluation of Roof Sheathing Fastening Schedules for High Wind Uplift Pressures, Thomas P. Cunningham, Jr., (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad

tons for the Future, Rohaid A. Cook, ed. and Mentrala Sotani, ed., 1994), p330-339.
Expandable Structures with Incorporated Roofing Elements, J. P. Valcárcel, F. Escrig and E. Martín, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994),

p752-761.

Fabric Roof Design Responds to New Technologies, Craig G. Huntington, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U.

Penalba, ed., 1994), p674-683.
Failure of Residential Building Envelopes as a Result of Hurricane Andrew in Dade County, Florida, Clifford Oliver and Chris Hanson, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p396-508.

Genetic Algorithms in Discrete Optimization of Steel Truss Roofs, Vlasis K. Koumousis and Panos G. Georgiou, CP

July 94, p309-325.

History and Development of Fabric Structures, R. E. Shaeffer, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p979-989.

Improvements to Residential Construction on Kauai After Îniki, Ken K. Hayashida and Dennis K. Hanatani, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p617-625. Marta North Line Midtown Station, Jerzy T. Jacak and

Cheryl L. McAfee, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p176-181.

Membrane Structures: Technological Innovation and Architectural Opportunity, Edmund Happold, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p547-559

- Microtunneling Creates Pipe Roof in Record Time, CE Sept. 94, p11.
- Modified Roof Erection System, James D. Stevens and Alan L. Murray, CO Dec. 94, p828-837.
- Morphology of Reciprocal Frame Three-Dimensional Grillage Structures, John C. Chilton, Ban Seng Choo and Jia Yu, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1065-1074.
- Nonlinear Behavior of Northlight Reinforced Concrete Shells, P. Srinivasa Rao and S. Duraiswamy, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p837-846.
- Performance of Metal-Plate-Connected Wood Truss Roof Systems During Hurricane Andrew, Ramon M. Riba, Michael H. Triche and Charles Hoover, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p632-641.
- Performance of Plywood and OSB Sheathing During Hurricanes Andrew and Iniki, Edward L. Keith, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p313-329.
- Project Case Study: Space Frame Roof Structure, Main Stadium, Shah Alam Sport Complex, Selangor, Malaysia, James A. Moses, (*Spatial, Lattice and Tension Structures*, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p377-382.
- Relationship Between Residential Insurance Losses and Wind Conditions in Hurricane Andrew, Peter R. Sparks and Shiraj A. Bhinderwala, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p111-124.
- Review of Cold-Formed Steel Purlin Design, Roger A. La-Boube, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1578-1580.
- Roof-Project Coordinator Recalls Good Times (ltr), CE Apr. 94, p35.
- Roof-Snow Load for Seismic-Design Calculations, Michael J. O'Rourke and Robert S. Speck, Jr., ST Sept. 92, p2338-2350.
- Seismic Damage-Control Design of Gypsum-Roof Diaphragms, Sashi K. Kunnath, Mehrdad Mehrain and William E. Gates, ST Jan. 94, p120-138.
- A Statistical Analysis of Wind Damage to Single-Family Dwellings Due to Hurricane Hugo, Serji Amirkhanian, Peter Sparks and Sandy Watford, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1042-1047.
- Surface Pressures on the Roof of the Texas Tech Experimental Building: Model and Full-Scale, Henry W. Tieleman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1445-1450.
- Testing Methods for Roof Systems, Phillip J. Smith, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p340-349.
- Time-Dependent Load-Distribution Behavior of Parallel-Member Wood Systems, P. Hong, K. J. Fridley and D. V. Rosowsky, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1088-1093.
- Uplift Resistance of Plywood and OSB Roof Sheathing, S. D. Shiff, D. P. Mizzell and M. D. Zaitz, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1054-1059.
- The Use of ETFE Foils in Lightweight Roof Constructions, Craig Schwitter, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p622-631.
- Wind Deflection Probability Analysis, Benjamin J. Biller, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p869-874.
- Wind Loads on Low Rise Structures: A Survey, B. L. Sill and T. A. Reinhold, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1030-1035.

Wind Resistance of Conventional Light-Frame Buildings, Ronald W. Wolfe, Ramon M. Riba and Mike Triche, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p652-662.

Roofs, cable

- A Design for a Football Stadium Roof Enabling Growth of a Natural Grass Playing Surface: Sydney Football Stadium - Australia, G. S. Ramaswamy, D. S. Thomas, I. Norrie and L. Thorogood, (Spatial, Lattice and Tension Structures, John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p28-37.
- Georgia Dome Cable Roof Construction Techniques, Wesley R. Terry, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p563-572.
- Phoenix Central Library: Reading Room Roof, Michael W. Ishler, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p38-46.

Roofs, long span

- Columnless in Chicago, Daniel A. Cuoco, Udom Hungspruke and Robert P. DeScenza, CE Nov. 94, p42-45.
- Current State of Development and Future Trends in Employment of Air-Supported Roofs in Long-Span Applications, Kris P. Hamilton, David M. Campbell and Paul A. Gossen, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p612-621.
- Effects of Spatial Triangulation on the Behavior of "Tensegrity" Domes, David M. Campbell, David Chen, Paul A. Gossen and Kris P. Hamilton, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p652-663.
- The Georgia Dome and Beyond: Achieving Lightweight -Longspan Structures, Matthys P. Levy, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p560-562.
- Tensile Structures Highlight New Denver Airport, Horst Berger and Edward M. DePaola, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p957-968.

Rosenblueth, Emilio

Emilio Rosenblueth, Known for Earthquake-Resistant Designs, Dies at 67, NE Aug. 94, p6.

Rotating biological contactor

Minimization of Multistage RBC Active Disc Area, Roland Leduc and Ian Buchanan, EE Mar./Apr. 93, p271-286.

Rotatio

hp Version of Finite-Element Mixed Method, Michelle M. Crull and P. K. Basu, EM Nov. 94, p2342-2360.

Roughnes

- An Analysis of Flow Velocity Profiles, Stream Bed Roughness, and Resistance to Flow in Natural Gravel Bed Streams, Normand E. Bergeron, (Hydraulic Engineering '94', George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p692-696.
- Analyzing Field Data for Hazen-Williams and Darcy-Weisbach Equations, Donald Clark, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), pl-9.
- Bed Load Roughness in Supercritical Flow, Scott E. Stonestreet, Ronald R. Copeland and Darla C. McVan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p747-751.
- Bias in Regression Estimates of Manning's n, Kenneth L. Wahl, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p727-731.
- Critical and Supercritical Flows in two Unstable, Mountain Rivers, Toutle River System, Washington, Andrew Simon and J. H. Hardison, III. (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p741-745.
- Dimensionally Homogeneous Manning's Formula, Ben Chie Yen, HY Sept. 92, p1326-1332.

Effect of Aggregation on Vibrio Cholerae Inactivation, Robert M. Clark, Eugene W. Rice, Bennett K. Pierce, Clifford H. Johnson and Kim R. Fox, EE July/Aug. 94, p375-892.

Effect of Roughness and Thickness of Biofilms on External Mass Transfer Resistance, Tian C. Zhang, Paul L. Bishop and James T. Gibbs, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p593-600.

Effects of Routine Maintenance on Flexible Pavement Condition, Abdullah I. Al-Mansour, Kumares C. Sinha and Thomas Kuczek, TE Jan./Feb. 94, p65-73.

Flow Capacity of Rehabilitated Sanitary Sewers, Kenneth K. Kienow, Karl E. Kienow and Paul E. Kienow, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p28-42.

Flow patterns in a mountain stream, Lisa C. Hubbard and Colin R. Thorne, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p737-741.

Generalized Inner Region Velocity Distribution Equation, Prabhata K. Swamee, HY May 93, p651-656.

The Impacts of Roughness Bars on the Mixing Processes, Jianlu Xu and Hsieh Wei Shen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p533-537.

Interface Shear-Strength Properties of Roughened HDPE, Marc E. Orman, GT Apr. 94, p758-761.

Macro-Roughness Effects on Stream Reaeration, Douglas B. Moog and Gerhard H. Jirka, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p994-998.

Modeling Bottom Friction in Wind-Wave Models, Hendrik L. Tolman, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p769-783.

A new approach for the estimation of extreme roughness in torrents by Hydraulic and Photogrammetry, Hanspeter Hodel, Thomas P. Kersten and Isidor Storchenegger, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p697-701.

Normal-Depth Equations for Irrigation Canals, Prabhata K. Swamee, IR Sept./Oct. 94, p942-948.

On Habitat Simulation in Mountain Rivers, Robert T. Milhous, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p850-854.

Simple Method for Identification of Border Infiltration and Roughness Characteristics, John D. Valiantzas, IR Mar./ Apr. 94, p233-249.

Velocity Measurements by the "One-Orange Method", B. A. Christensen, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p76-85.

Velocity Measurements in Asymmetric Turbulent Channel Flows, R. N. Parthasarathy and M. Muste, HY Sept. 94, p1000-1020.

Roughness coefficient

Automated Field Irrigation System Using Side Weirs, R. Singh and T. Satyanarayana, IR Jan./Feb. 94, p48-59.

Chezy Formula Versus Theory and Common Sense, Witold Gustaw Strupczewski, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p662-666.

Design of Manning's-Rougness-Coefficient Study in New York State, William F. Coon, (*Hydraulic Engineering* '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p677-681.

Determining Optimal Parameter Dimensions for Water Distribution Network Models, Keshaw N. Mallick, Kevin E. Lansey and Kevin S. Tickle, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p758-761.

Evaluating Flow Resistance Using Height of Roughness Protrusions, Ivana Marešová, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p712-716. Factors Affecting Accuracy of Slope-Area Discharge Determination of the September 1992 Flood in Raven Fork, Western North Carolina, W. Harold Eddins and Thomas J. Zembrzuski, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p645-649.

Flow Capacity through Wide and Submerged Vegetal Channels, M. W. Abdelsalam, A. F. Khattab, A. A. Khalifa and M. F. Bakry, IR Sept./Oct. 92, p724-732.

Roughness Coefficient in Mountain Rivers, Alfonso Ugarte and Manuel Madrid, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p652-656.

Roughness Coefficients for High-Gradient Channels in New York State, William F. Coon, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p722-726.

Study of Friction Factors in the Upper Reaches of the Rio Grande, Cassie C. Klumpp and Drew C. Baird, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p702-706.

Supercritical Flows Versus Subcritical Flows in Natural Channels, Douglas J. Trieste, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p732-736.

Route preferences

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The Nevada Statewide Radioactive Materials Transportation Plan, Maria Ardila-Coulson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p150-157.

Population Estimation Techniques for Routing Analysis, Shashi K. Sathisan and Anil K. Chagari, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p658-665.

Studying Route Choice Behavior Using Computer-Aided Telephone Interviews and GIS, Mohamed A. Abdel-Aty, Ryuichi Kitamura, Paul P. Jovanis, Prasuna Reddy and Kenneth M. Vaughn, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1343-1348.

Route surveys

Analysis of Potential Highway Routes to Yucca Mountain, Shashi K. Sathisan, Emelinda M. Parentela and Michael S. Lee, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1278-1285.

Decision Aids for Enhancing Intergovernmental Interactions: The Prenotification Analysis Support System (PASS), Marcus Lester, Edward Liebow and Judith Holm, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p168-175.

An Evaluation of Rail Access Routes to Yucca Mountain, Shashi K. Sathisan and Emelinda M. Prarentela, (Hip-Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1270-1277.

Highway and Interline Transportation Routing Models, David S. Joy and Paul E. Johnson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1263-1269.

Model to Estimate Highway Earthwork Cost in Nepal, Naresh Sthapit and Hiroshi Mori, TE May/June 94, p498-504.

The Nevada Statewide Radioactive Materials Transportation Plan, Maria Ardila-Coulson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p.150-157.

Program Committee, 1994), p150-157.

Railroad Accident Probability Model, Phillip Fanchon and H. Barry Spraggins, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p666-670.

Routes

Best Route GIS System, Siripong Malasri and L. Yu Lin, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1123-1130.

Data Fusion for an ATIS Operational Test: Description and Computational Issues, Nagui M. Rouphail and Peter Nelson, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1532-1535.

Design of a Network and Travel Simulator: A Tool Box for the Analysis of Route Choice Behavior in the Presence of Information, Kenneth M. Vaughn, Prasuna Reddy, Ryuichi Kitamura, Paul P. Jovanis and Mohamed A. Abdel-Aty, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1743-1750.

Efficient Path Planning Strategies for Unmanned Rover Vehicles, Kevin K. Gifford and George W. Morgenthaler, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1288-1308.

Interactive Design of Service Routes, Jin-Yuan Wang and Jeff R. Wright, TE Nov./Dec. 94, p897-913.

Strategic Ship Routing Impacts of Temporal Coverage with Real-time Satellite Altimeter-Based Current Information, Young-Kyun Lee, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p483-489.

Using Interactive Simulation to Explore Drivers' Response to Visual Information Systems, Jeffrey L. Adler, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1735-1742.

Nonlinear Reservoir Routing: Particular Analytical Solution, H. A. Basha, HY May 94, p624-632.

Simultaneous Routing and Siting for Hazardous-Waste Operations, Timothy L. Jacobs and John M. Warmerdam, UP Sept. 94, p115-131.

Rubber

Bending of Cord Composite Plates, Carol Kittredge Shield and George A. Costello, EM Apr. 94, p876-892

- Effects of Crumb Rubber Type and Content on Performance Related Properties of Asphalt Binders, H. U. Bahia and R. Davies, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p449-
- Fundamental Properties of Asphalt Rubber Blends, William H. Daly, Louay N. Mohammad, Ioan Negulescu, Harold R. Paul and Jeffrey Youngblood, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p425-431.

Kentucky's Experience with CRM-HMA, Kamyar C. Mahboub, Karen A. Sizemore, Robert D. Bosley and Philip A. Creamer, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p432-440.

Performance Evaluation of Crumb-Rubber Modified Asphalt Interlayers, Olga Pendleton and Cindy Estakhri, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p441-448.

Use of Waste Rubber in Light-Duty Concrete Pavements, Richard R. Schimizze, James K. Nelson, Serji N. Amirkhanian and John A. Murden, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p367-374.

Rubber modified asphalt

Asphalt Rubber a Federal Perspective, Joseph Massucco, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p467-474.

Asphalt-Rubber Hot Mix in Road Rehabilitation, Kirk L. Beaty, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p319-326.

The Use of Crumb Rubber Modifier in Hot-Mix Asphalt, Mark S. Buncher and E. R. Brown, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p53-63.

Rubble-mound breakwaters

Breakwater Armor Damage due to Wave Groups, Josep R. Medina, Robert T. Hudspeth and Claudio Fassardi, WW Mar./Apr. 94, p179-198.

Breakwater Design and Construction Harbor Centre Marina Sheboygan, Wisconsin, Tom Holtan, Dave Anglin, Dave Sanders and Larry Ryan, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p292-299.

The Evolution of Breakwater Design, Billy L. Edge, Orville T. Magoon and William F. Baird, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p1024-1039.

Overview of the Sines West Breakwater Reconstruction, Orville T. Magoon, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p1-2.

Permeability Measurements for the Modelling of Wave Action On and In Porous Structures, Marcel R. A. van Gent, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p671-

Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, (Orville T. Magoon, chmn.), 1994, 0-7844-0044-X, 443pp.

Stability Analysis for Multilayered Rubble Bases, Wojciech Sulisz, WW May/June 94, p269-282.

Stability and Wave Transmission at Low-Crested Rubble-Mound Structures, Jentsje W. van der Meer and Ivar F. R. Daemen, WW Jan./Feb. 94, p1-19.

Machine Learning of Design Rules: Methodology and Case Study, Tomasz Arciszewski, Eric Bloedorn, Ryszard S. Michalski, Mohamad Mustafa and Janusz Wnek, CP July 94, p286-308.

Runoff

- Combined Stormwater Drainage and Treatment, Jorge Romero-Lozano, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1229-1231.
- Computational Discretization Effect on Rainfall-Runoff Simulation, Edward Mazion, Jr. and Ben Chie Yen, WR Sept./Oct. 94, p715-734.
- Development of an Experimental Watershed for Testing Nonpoint Source Pollution from Urban Runoff, Vassilios A. Tsihrintzis, Hector R. Fuentes and Rizwan Hamid, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1237-1241.

DOE Lab Develops System to Sack Sodium Nitrate, ET Apr./May 94, p10.

Estimation of Peak Flow and Runoff Volume with Response Surface Method, Shie-Yui Liong and Yaacob Ibrahim, WR Mar./Apr. 94, p161-175.

Evaluation of Runoff and Erosion Models, Tien H. Wu, James A. Hall and James V. Bonta, IR Mar./Apr. 93, p364-382.

Maximum Surface Storage Provided by Crop Residue, John E. Gilley and Eugene R. Kottwitz, IR Mar./Apr. 94,

Modeling Hydrologic and Pollutant Transport Processes for Stromwater Runoff to Surface Waters, Leslie L. Shoemaker, Mohammed Lahlou, Andrew Stoddard and James Pagenkopf, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

Non-Point-Source Pollution from Interrill Flow Areas, A. Parr, S. Limback, B. McEnroe and S. Zou, IR Nov./Dec. 94, p1056-1066.

Probabilistic Design of Open Drainage Channels, Said M. Easa, IR Nov./Dec. 92, p868-881.

Regulation of Nonpoint Sources, William Whipple, Jr., (National Water Resources Regulation: Where is the En-vironmental Pendulum Now?, Howard Holme, ed., 1994), p198-203.

Reliability Analysis of Open Drainage Channels under Multiple Failure Modes, Said M. Easa, IR Nov./Dec. 94, p1007-1024.

Seasonal Distributions of Peak Flows From Small Agricultural Watersheds, James V. Bonta and A. Ramachandra Rao, IR Mar./Apr. 94, p422-439.

Sheet Flow Resistance of Asphaltic Pavements, Joseph R. Reed, John C. Warner and Richard S. Huebner, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1100-1104.

Spatial Disaggregation for Studies of Climatic Hydrologic Sensitivity, Daniel Epstein and Jorge A. Ramírez, HY Dec. 94, p1449-1467.

A Study on Mathematical Model for Sediment Yield in Mountain Regions with Large Hillside Slopes, Duo Fang and Guoliang Yu, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

pr) 22-730.
Water Infrastructure Risk Ranking and Filtering Method, Tomas Dolezal, Yacov Y. Haimes and Duan Li, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p56-72.

Runoff coefficient

Probable Maximum Flood Estimation for New and Existing Dams, Anand Prakash, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p361-365.

Runoff forecasting

Parameter Regionalization of a Daily Baseflow Runoff Model, Paolo Bartolini and Juan B. Valdés, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p97-101.

Rural areas

Design of Branched-Water-Supply Network on Uneven Terrain, Brian Young, EE July/Aug. 94, p974-980. Household Hazardous Wastes—Discard Patterns and Man-

agement Options, Chris Zeiss, UP June 94, p87-103.

Lewis and Clark Rural Water System: A Regional Approach to Solving Domestic Water Supply Problems for a Tri-State Area, Pamela A. Bonrud, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p161-164.

Policy on Private Water Sales in Rural Ghana, Fred O.

Policy on Private water sures in Rulai Grammi, Tee J. Boadu, WR Nov./Dec. 94, p944-961.

Urban Versus Rural Risk Perception Relating to High-Level Nuclear Waste, Dennis L. Soden, (High Level Ra-dioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p136-141.

Willingness and Ability to Pay for Rural Water, Jonathan Platt and Steven Piper, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p157-160.

Rural roads

Analysis of Accident Reduction Potentials of Pavement Markings, Hashem R. Al-Masaeid and Kumares C. Sinha, TE Sept./Oct. 94, p723-736.

Russia

A Comparative Study of U.S. and Russian High-Level Waste Repository Design Concepts, Z. T. Bieniawski and E. V. Kuzmin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p515-522.

Investigation and Design Concepts for a Nuclear Waste Repository in the Kola Peninsula of Northwest Russia, Nikolay N. Melnikov and William R. Sharp, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p523-529

Letter From Moscow, WP Special issue 94, p39. A Summary of the NEPSTP Nuclear Safety Program, Albert C. Marshall and G. Kompanietz, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p708-716.

TOPAZ II Qualification and Nuclear Testing Program, G. L. Schmidt, F. Thome, B. Ogloblin and E. Glushkov, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p729-738.

TOPAZ II System Description, Susan S. Voss, (Engineering, Construction, and Operations in Space IV, Rodne Galloway, ed. and Stanley Lokaj, ed., 1994), p717-

728

USAid to Alleviate Aral Sea Depletion, CE Feb. 94, p18-

Sadler, Warren W.

Charles A. Parthum Is 1994 Nominee for ASCE President-Elect, NE July 94, p3.

Applications of Field Testing to Bridge Evaluation, Fred Moses, Jean Paul Lebet and Rolf Bez, ST June 94, p1745-1762.

ASCE Quality Summit Raises Troubling Questions on Safety and Other Issues Confronting Engineers, NE Jan. 94, pl.

Computer Analysis of Lateral Loading in Wood-Framed

Structures, R. Williams, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1513-1515.
Computer Implementation of Fuzzy Reasoning in Tendering, C. M. Tam, K. C. Lam and Albert T. P. So, (Computer Inc.) puting in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1357-1364.

Computer-Assisted Coal Mining — An Overview, George H. Schnakenberg, Jr., (Robotics for Challenging Envi-ronments, Laura A. Demsetz, ed. and Paul R. Klarer, ed.,

1994), p427-436.

560

Construction Manager Held Liable for Failure to Enforce OSHA Regulations, CE Sept. 94, p38.

The Context-Oriented Model: An improved Modeling Approach for Representing and Processing Design Standards, Han Kiliccote, James H. Garrett, Jr., Thomas J. Chmielenski and Kent A. Reed, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p145-152. Demands and Satisfiers for Automation and Robotics in

Construction: Differences Between Japan and the United States, Hiroshi Saito and John G. Everett, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p419-426.

A Discussion of Nuclear Propulsion in Space Travel, Jeff Mitchell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj,

ed., 1994), p756-760.

Dry Storage and Transportation of Failed Fuel, Robert D. Quinn and Brandon D. Thomas, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p949-954.

Dry Storage of Highly Enriched Uranium Fuel, D. L. Lord, J. A. Carter and L. F. Ermold, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p1131-1136.
Effects of Policy and Other Changes on Transuranic Waste Disposal at WIPP, Robert H. Neill and Lokesh Chaturvedi, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p280-284.

The Efficiency of Source Terms in Performance Assessments for Salt Repositories, Dieter Buhmann, Jürgen Brenner and Richard Storck, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p501-507. Evaluation of Cast Iron Columns for Safety and Reliability, Joel S. Weinstein, William Lamartina and Mark Tamaro, (Structures Congress XII, N. C. Baker, ed. and

Barry J. Loodno, ed., 1994), p1544-1549. Feasibility Analysis of Automated Material Handling for Hazardous Waste Remediation, Andrew F. Griffith, Carl T. Haas and Richard L. Tucker, (Robotics for Challeng-ing Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p338-346.

A Feature Based Path Planning System for Robotic Stencil-ing of Roadway Markings, H. Kochekali and B. Ravani, (Robotics for Challenging Environments, Laura A. Dem-

setz, ed. and Paul R. Klarer, ed., 1994), p52-60. A Gap in the Surface Water Treatment Rule: The Watersheds, Daniel A. Okun, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p501-507.

Highway and Interline Transportation Routing Models, David S. Joy and Paul E. Johnson, (High Level Radioac-tive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1263-1269. Humanware, Human Error, and Hiyari-Hat: A Template of

Unsafe Symptoms, Shigeomi Nishigaki, Jeannette Vav-rin, Noriaki Kano, Toshiro Haga, John C. Kunz and Kin-cho Law, CO June 94, p421-442.

The IAEA's High Level Radioactive Waste Management Programme, D. E. Saire, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2279-2283.

Integrating Computer Applications for Traffic Data Analysis, Patricia B. Noyes and Pete d'Oronzio, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1339-1342.

The Long Term Radioactive Storage Alternative, Cyril W. Draffin, Jr., Richard G. Little and Richard Blauvelt, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p13-17

Looking for Solutions to the Lead-Paint Crisis, CE Aug. 94, p19,21.

A Mobile Robot for Reconnaissance of HAZMAT Incident Sites, Richard V. Welch, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p269-277.

Multi-Purpose Canister At-Reactor and Monitored Retriev-al Storage, Tonya H. Sawyer and Robert G. Eble, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p1380-1386.

Multi-Purpose Canister Criticality Control Design Fea tures, James R. Thornton, Kelvin J. Montague, Alan H. Wells and Daniel A. Thomas, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

Waste Munagement, 11gn Level Radioactive Maste 110 gram Committee, 1994), p823-830. NEPA Implementation: The Department of Energy's Pro-gram to Manage Spent Nuclear Fuel, Dillard B. Shipler, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1532-1537.

Nuclear Propulsion, Evan Dudley, (Engineering, Construc-tion, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p761-764.

OSHA and the Design Professional, Arthur G. Sapper, CE Apr. 94, p60-62.

Performance Assessment of the Copper/Steel Canister, Pa-trik Sellin, Torsten Eng and Lars Werme, (High Level Radioactive Waste Management, High Level Radioac-tive Waste Program Committee, 1994), p1020-1029.

Poorer Is Riskier: Opportunity for Change, Richard C. Schwing, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p102-121.

Predicting Strength Variability of Concrete Offshore Structures, Perry Adebar, Ricardo Foschi and Felix Yao, ST

July 94, p2108-2122

A Real-Time Control Network for Robotic Mining, William H. Schiffbauer, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed.,

1994), p437-447.

Recent Advances in Precision Surveying Technology and Integrated Deformation Analysis, Adam Chrzanowski, W. Trevor Greening and Anna Szostak-Chrzanowski, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p721-731.

Robotic Workcell for Waste Handling, Gregory P. Starr, Gregory W. Donohoe, David Wilson and Raghu Kopalle, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p347-355.

Safeguarding the Disposal of Canada's Used Nuclear Fuel, P. Baumgartner and G. R. Simmons, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p1782-1790.

Safety at the Site, Virginia Fairweather, CE Aug. 94, p50-

Safety Grates in Supercritical Channels, Julia E. Allred-Coonrod, IR Jan./Feb. 94, p218-224.

Second-Order Upper Bounds on Probability of Intersection of Failure Events, Qiang Xiao and Sankaran Mahadevan, EM Mar. 94, p670-674.

Seismic Performance of Railway Bridges, V. Sharma, J. Choros, E. M. Maragakis and W. G. Byers, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p367-372.

Sensitivity of Radiological Impacts of a Waste Disposal System to Radionuclide Sorption in the Geosphere, T. W. Melnyk, J. McMurry and F. P. Sargent, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1222-1228.

A Space Suit for Productive and Safe Extravehicular Activity (EVA), Brand Norman Griffin, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1372-1381. Spacecab: A Concept for Commercial Human Spaceflight, Andrew Petro, Engineering, Construction, and Opera-tions in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1504-1511.

STRANDNET: A Top-Level Storage, TRANsportation & Disposal NETwork Systems Analysis Tool for Spent Nu-clear Fuel Waste Management, Johnny Brock, Felix Godwin and Ray Mitchell, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1704-1711.

Structured Tradeoffs Preference Elicitation: Evaluating CRWMS Design and Operations, Hollister Hartman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p619-626.

A Summary of the NEPSTP Nuclear Safety Program, Al-bert C. Marshall and G. Kompanietz, (Engineering, Con-

struction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p708-716. The Tracking of High Level Waste Shipments—Transcom System, P. E. Johnson, D. S. Joy, R. B. Pope, T. M. Thomas and P. B. Lester, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1242-1248.

Traffic Safety Research: Database Issues and Analysis Techniques, Yusuf M. Mohamedshah and Charles C. in Civil Engineering, Liu, (Computing

Khozeimeh, ed., 1994), p1846-1853.

Unexploded Ordnance (UXO) and Dredging, Timothy Welp, James Clausner, Raymond Pilon, Joan Pope and Richard Lewis, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p48-55.

We'd do it Again, Say Partnering Vets, ME July/Aug. 94, p11.

Safety analysis

Accurate and Rapid Determination of Fatigue Damage in Steel Bridges, C. Hahin, J. M. South, J. Mohammadi and R. K. Polepeddi, ST Jan. 93, p150-168.

Analysis of Accident Reduction Potentials of Pavement Markings, Hashem R. Al-Masaeid and Kumares C. Sinha, TE Sept./Oct. 94, p723-736.

The Development of a Packaging Handbook, L. B. Shap pert, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1237-1241.

Effects of Axial Burnup Distributions on the Reactivity of Spent Fuel, Theodore A. Parish, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p744-751.

The First Multipurpose Spent Fuel Container Reviewed by the U.S. Nuclear Regulatory Commission (USNRC), Ivan F. Stuart, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p467-476.

Implementation of Response Function Concept for Spent Fuel Cask Analyses, C.-K. Chris Wang, Jack W. Foster and Dominique Napolitano, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p752-756.

Increasing the Credibility of Scientific Analyses, Thomas A. Cotton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p296-300.

1994, p.296-300. Integrating Scientific Results for a Post-Closure Safety Demonstration, Edward C. Taylor, Lawrence D. Ram-spott, Scott Sinnock and William M. Sprecher, (High Level Radioactive Waste Management, High Level Ra-dioactive Waste Program Committee, 1994), p301-305.

Long-Term Evolution of the Biosphere in the Context of High-Level Waste Repository, Marianne Menut and Catherine Valentin-Ranc, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2152-2159.

Methodology of Scientific Investigations for Radioactive Waste Disposal in Geological Formations of Ukraine, D. P. Khrushchov, O. M. Kharitonov and Eu. A. Yakovlev, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1514-1520.

Quality Summit Focuses on Safety, CE Jan. 94, p11.

Robust EBS Design and Source-Term Analysis for the Partially Saturated Yucca Mountain Site, Mick Apted, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p485-490.

The Safety Advisor: An Interactive Object-Oriented Pro-gram for Assessing the Safeness of Roadway and Roadside Designs, Malcolm H. Ray, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p341-348.

Safety Assessment of a Chemical Reactor Vessel, A. Wiedermann, A. Longinow and F. Calabrese, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p1-6.

Swiss Guideline: Protection Objectives for the Disposal of Radioactive Waste, Auguste Zurkinden, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1429-1434.

Safety engineering

Locking Into Success, Brian H. Greene, Andrew Schaffer, Donald A. Bruce and John A. Gerlach, CE Apr. 94, p48-50.

Safety factors

Bantamweight Jack Gives Atlas Performance, CE Oct. 94, p86.

The Canadian Approach in the Design of Wood Structures: Conversion to Limit States Design, Dominique P. Janssens, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p514-519.

Reliability Applied to Slope Stability Analysis, John T. Christian, Charles C. Ladd and Gregory B. Baecher, GT

Dec. 94, p2180-2207.

Reliability-Based Pier Scour Engineering, Peggy A. Johnson, HY Oct. 92, p1344-1358.

Requirements for Applications of Robotics and Automation in Highway Maintenance and Construction Tasks, B. Ravani, S. A. Velinsky and T. H. West, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p356-364.

Robotic Opportunities for Hazardous-Waste Cleanup, Edward J. Jaselskis and Mary Rose Anderson, EE Mar./

Apr. 94, p359-378.

Safety Analysis of Suspension-Bridge Cables: Williamsburg Bridge, John Matteo, George Deodatis and David P. Billington, ST Nov. 94, p3197-3211.

The Slender Tower of 52-54 East End Avenue, Ahmad Rahimian, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1562-1567. Strategies for Avoiding Civil Liability, Robert W. Day, EI

July 94, p265-269.

Surficial Stability of Compacted Clay: Case Study, Robert W. Day, GT Nov. 94, p1980-1990.

Safety programs

ASDSO to Archive Data on U.S. Dams, CE Oct. 94, p25. Raising Students' and Educators' Awareness of Radioac-tive Materials Transport Through Creative Classroom Materials and Exhibits, Judith Holm, Cheryl Sandoz, Jennifer Dickenson, Anne Marie Smith and Jan Cortelyou Lee, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p213-216.

Strategies for Increasing Bicycle and Pedestrian Safety and Use, Brian L. Bowman, Robert L. Vecellio and David W. Haynes, UP Sept. 94, p105-114.

Safety research

The Impact of Buoyant, Gas-Phase Flow and Heterogeneity on Thermo-Hydrological Behavior at Yucca Mountain, Thomas A. Buscheck and John J. Nitao, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2450-2474.

Salaries

ASCE 1993 Salary Survey, ASCE Committee on Employment Conditions of the Professional Practice Division, EI Apr. 94, p221-230.

ASCE Salary Survey 1993, Committee on Employment Conditions of the Professional Practice Division of the American Society of Civil Engineers, (D. Wayne Klotz, chmn.), 1994, 0-87262-893-0, 66pp. Data on Salary and Benefits for Civil Engineers Can be Found in Results of ASCE's Latest Survey, NE Feb. 94, p14.

Engineers Need More Than Four Years of Study, CE Dec. 94, p32.

Engineers Should Learn to Use System to Gain Respect and Money (ltr), CE Sept. 94, p32-33.

Engineers' Salaries: It's Not What You Do, but where You Do It that Counts, NE Apr. 94, p15.

Follow Doctors and Lawyers? No Thanks (ltr), CE Dec. 94, p28.

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Latest ASCE Salary Index is Released, CE Feb. 94, p68. Latest ASCE Salary Index is Released, CE Aug. 94, p64.

New Engineer Grads Find High Salaries and Steady Demand, CE July 94, p68.

Protectionism Ultimately Destroys the Protected (ltr), CE Dec. 94, p28-29.

Setting A Place for Engineers (ltr), CE Dec. 94, p29. Strategies to Enhance Well-Being of Civil Engineering

Profession, Michel Bruneau, El Oct. 94, p341-359.

Salgo, Michael N.

ASCE Elevates 13 of Its Own to Honorary Membership, NE May 94, p3.

Atlanta Ceremony Celebrates 13 New Honorary Members of ASCE, NE Dec. 94, p2-3.

Agroforestry Drainage Management Model: I: Theory and Validation, F. F. Karajeh, K. K. Tanji and I. P. King, IR Mar./Apr. 94, p363-381.

Agroforestry Drainage Management Model: II: Field Water Flow, F. F. Karajeh and K. K. Tanji, IR Mar./Apr. 94.

Characterization of Circulation and Salinity Change in Galveston Bay, Keh-Han Wang, EM Mar. 94, p557-579.

Design of Agricultural Drainage with Adaptive Irrigation Management, Luis A. Garcia, Kenneth M. Strzepek and Terence H. Podmore, IR Jan./Feb. 94, p179-194.

Factors Affecting Degradation of Clay Masses, Paul A. Gilbert, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p449-457.

Goal Programming Models for Determining Freshwater Inflows to Estuaries, Ning Mao and Larry W. Mays, WR May/June 94, p316-329.

Ground-Penetrating Radar For Salt-Affected Soil Assess-ment, Sun F. Shih and Don L. Myhre, IR Mar./Apr. 94, p322-333.

Influence of Geotextiles on Performance of Saline Sebkha Soils, Sahel N. Abduljauwad, Fouad Bayomy, Abdul-Karim M. Al-Shaikh and Omar S. Baghabra Al-Amoudi, GT Nov. 94, p1939-1960.

Influence of Sikes Cut on Apalachicola Bay, FL; A Preliminary Analysis from a Three-Dimensional Perspective, mary Analysis from a Intee-Dimensional Perspective William K. Jones, Boris Galperin, Robert H. Weisberg and T. S. Wu, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p351-365.

R. Proni, Hening Huang and William P. Dammann, HY Dec. 94, p1409-1425. Initial Dilution of Southeast Florida Ocean Outfalls, John

Integration of Water Rights and Salinity Considerations in Comprehensive River Basin Management, Ralph A. Wurbs, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p396-399.

Modeling Circulation and Salinity Transport in the Indian River Lagoon, M. Z. Moustafa and J. M. Hamrick, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p381-395.

New Methodology for Optimization of Freshwater Inflows to Estuaries, Yixing Bao and Larry W. Mays, WR Mar./ Apr. 94, p199-217.

Optimization of Freshwater Inflows to Lavaca-Tres Palacios, Texas, Estuary, Yixing Bao and Larry W. Mays, WR Mar./Apr. 94, p218-236. Role of Constructed Wetlands in Water Resources Management, Christie Moon Crother, John S. Crossman and P. Ravishanker, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p669-672.

Salinity and Dissolved-Oxygen Dynamics in a Wind-Driven Estuary, Jerad D. Bales and R. G. Garrett, (Hy-draulic Engineering '94, George V. Cotroneo. ed. and Ralph R. Rumer, ed., 1994), p1311-1315.

Simulated Circulation and Transport in Adjacent Wind-Driven Estuaries in North Carolina, Jeanne C. Robbins and Jerad D. Bales, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p105-118.

Stochastic Optimal Control for Determination of Freshwater Inflows to Estuaries, Bing Zhao and Larry W. Mays, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

p645-648.

Three Dimensional Modeling of Circulation and Salinity in Mt. Hope Bay and the Lower Taunton River, Wenrui Huang and Malcolm M. Spaulding, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craic Surgeon ed. 1094, p.500.581 Craig Swanson, ed., 1994), p500-508.

Water and Wildlife Enhancement with Land Retirement, Earl Ekstrand and Richard Johnson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p541-544.

Wind-Driven Dispersion in New Jersey Coastal Waters, A. K. M. Quamrul Ahsan, Michael S. Bruno, Lie-Yauw Oey and Richard I. Hires, HY Nov. 94, p1264-1273.

The Efficiency of Source Terms in Performance Assessments for Salt Repositories, Dieter Buhmann, Jürgen Brenner and Richard Storck, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p501-507.

Final Storage of High Activity Waste in Spain, Aurelio Uli-barri, Fernando Huertas and Jesús Alonso, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p538-548.

- A Formal Expert Judgment Procedure for Performance Assessments of the Waste Isolation Pilot Plant, Kathleen M. Trauth, Robert V. Guzowski and Stephen C. Hora, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1745-
- Preliminary Investigation Results as Applied to Utilization of Ukrainian Salt Formations for Disposal of High-Level Radioactive Waste, Stella B. Shekhunova, Oleg I. Petrichenko and Dmitry P. Khrushchov, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p1880-1885.

Agroforestry Drainage Management Model. III: Field Salt Flow, F. F. Karajeh and K. K. Tanji, IR Mar./Apr. 94,

Agroforestry Drainage Management Model: I: Theory and Validation, F. F. Karajeh, K. K. Tanji and I. P. King, IR Mar./Apr. 94, p363-381.

Effect of Saline Irrigation Water on Tree Growth, Ghulam Hussain and Otto J. Helweg, IR Sept./Oct. 94, p970-978.

Salt water intrusion

Assessing the Impact of Channel Deepening in Delaware Bay Through Numerical Modeling, K. W. Kim, B. H. Johnson and J. Gebert, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p29-41.

Evaluation of the Water Supply Potential of the Floridian Aquifer in Seminole County, Florida, Lee P. Wiseman, Robert P. Schreiber, Ricardo Diaz and Charles J. Voss, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p600-603.

Galveston Bay 3D Model Study, Channel Deepening, Circulation, and Salinity Results, R. Berger, W. Martin, R. McAdory and J. Schmidt, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p1-13.

Ground-Penetrating Radar For Salt-Affected Soil Assess-ment, Sun F. Shih and Don L. Myhre, IR Mar./Apr. 94,

p322-333

Influence of Sikes Cut on Apalachicola Bay, FL; A Preliminary Analysis from a Three-Dimensional Perspective, William K. Jones, Boris Galperin, Robert H. Weisberg and T. S. Wu, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p351-365.

Nakajima Subsurface Dam, Satoshi Nagata, Kazuki Azu-ma, Masato Asano, Teruyuki Nishijima, Hideaki Shiiba, David S. Yang and Reika Nakata, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p437-440.

A Three-Dimensional Numerical Simulation of Seasonal Flow and Salt Transport in the C&D Canal, Bernard B. Hisieh, David R. Richards and Jeff Gebert, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p595-599.

Investigation of Saltating Particle Motions, Hong-Yuan Lee and In-Song Hsu, HY July 94, p831-845.

On Measurements of Particle Spinning Motion, Hong Yuan Lee and In-Song Hsu, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p149-158.

Recent Improvement of Gao Qiao New Channel on Huang-pu River, Guoxian Zhu, WW July/Aug. 94, p368-381.

Salts

Dynamics of Coagulation of Clay Particles with Aluminum Sulfate, Hsiao-Wei Ching, Menachem Elimelech and Janet G. Hering, EE Jan./Feb. 94, p169-189.

Laboratory and Field Leaching Tests on Coastal Salt-Bearing Soils, Nabil F. Ismael, GT Mar. 93, p453-470.

Modified Oedometer for Arid, Saline Soils, Omar Saeed Baghabra Al-Amoudi and Sahel N. Abduljauwad, GT Oct. 94, p1892-1897.

Salts effects

Effect of Saline Irrigation Water on Tree Growth, Ghulam Hussain and Otto J. Helweg, IR Sept./Oct. 94, p970-978.

Numerical Modeling of Salt Transport at a Solid Waste Disposal Site Capped With Coastal Dredged Material, Ram Krishnamohan, John B. Herbich and Fred S. Williams, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1152-1161.

Sample disturbance

Settlement of Large Mat on Deep Compressible Soil, James P. Stewart, Hugh S. Lacy and Charles C. Ladd, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p842-859.

Samplers

Effect of Orientation and Size of Helley-Smith Sampler on Its Efficiency, Jocelyn M. Gaudet, André G. Roy and James L. Best, HY June 94, p758-766.

Dynamic Properties of Gravels Sampled by Ground Freezing, Shigeru Goto, Shin'ya Nishio and Yoshiaki Yoshimi, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994),

Plenty of this Sample to go Around, CE Oct. 94, p8.

Radiological Characterization of Hanford HLW Tank Farm Core Samples, Vojislav Banjac and A. Sharif Heger, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1110-1116.

Specimen Geometry and Toughness of Steel-Fiber-Reinforced Concrete, Lianrong Chen, Sidney Mindess and Dudley R. Morgan, MT Nov. 94, p529-541.

Analysis of Sand Movement on Noto Coast by Geochemical Method, Kazumasa Mizumura, Toshiharu Nishimoto and Takahiko Yamamoto, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p923-927.

Application of a Needle Probe in Measuring Local Parameters in Air-Water Flow, A. R. Zarrati and J. D. Hardwick, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed.,

1994), p296-300.

Bed-Load Sampling in Sand-Bed Rivers, Moustafa T. K. Gaweesh and Leo C. van Rijn, HY Dec. 94, p1364-

1384.

Biological and Physical Characterization of a Deep-Ocean Disposal Site off Northern California, James A. Blake, Catherine A. Courtney, Barbara Hecker, Brigitte Hilbig, Jo Ann Muramoto and Donald C. Rhoads, (*Dredging* '94, E. Clark McNair, Jr., ed., 1994), p111-120.

Dynamic Properties of Gravel Layers Investigated by In-Situ Freezing Sampling, Takeji Kokusho and Yukihisa Tanaka. (Ground Failures Under Seismic Conditions. Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994),

p121-140.

Effect of Data Sampling Time Resolution on Probability Distribution of Elapsed Time Between Rainfalls, James W. Ellerbroek, Ben Chie Yen and Robert Riggins, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p336-340.

Estimating Sediment Relative Density Using an Impact Core Sampler and Wave Equation-based Pile Analysis, James M. Schmidt and Donald E. Bruggers, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p1212-1219.

Fast Monte Carlo Simulations and Safety Index Checking, A. Sellier and A. Mébarki, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p260-265.

Galerkin Sampling Method for Stochastic Mechanics Problems, P. D. Spanos and B. A. Zeldin, EM May 94, p1091-1106.

A Gas Sampling System for Withdrawing Humid Gases From Deep Boreholes, Joseph P. Rousseau, William Thordarson and Mark A. Kurzmack, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2139-2145.

Goals and Requirements for Scientific Lunar Rovers, Charles Meyer, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed. and Paul R. Klarer, ed.,

1994), p166-174.

Phased and Layered Sampling for Navy Dredging, Sherry L. Ashbaugh, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1436-1440.

Quality Assurance and Quality Control in Laboratory Bioassays of Dredged Material, David W. Moore, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p728-

Robotics and Automation for Environmental Screening and Characterization, Kelly R. Tilford, Edward W. Jaselskis, Marvin S. Anderson and Ralph E. Patterson, III, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p329-337.

Sediment Measurement Instrumentation A Personal Perspective, E. V. Richardson, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p94-103.

Some Benefits of Grid by Number Sampling, David Crowder and Panayiotis Diplas, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p795-799.

Visual Investigation of Field Bed-Load Sampling, Moustafa T. K. Gaweesh, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p233-241.

Assessing Effects for Disposal Sites off San Francisco, Peter Hamilton and Allan Y. Ota, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bed-ford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p14-28.

- Costs and Benefits of Meeting the San Francisco Bay Copper Objective by Regulating Small Treatment Plants, Steven X. McHaney, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1232-1236.
- Enhancing Habitat at an Onshore Dredge Disposal Site, Gary W. Oates, William J. Silva and Gregory P. Mailho, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1461-
- The Fleets of San Francisco Crippled by Phony Science, Wm. P. Boland, Jr., (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p162-169.
- Issues Related to Modeling the Transport of Suspended Sediments in Northern San Francisco Bay, California, Ellen Thomas McDonald and Ralph T. Cheng, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p551-564.

Management of Dredged Material Disposal for San Francisco Bay Projects, Thomas H. Wakeman and Jacob Harari, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p484-489.

Nonlinear Analysis and Experimental Validation of a Stiffening Truss Chord of the Golden Gate Bridge, R. A. Dameron, R. S. Dunham and J. C. Castro, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1106-1114.

Reducing Discharges from San Francisco to the Bay, James J. Jordan and Sangeeta Goyal, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p842-845.

Safety Issue Boosts Record Soft Ground Jet-Grouting Job, CE Oct. 94, p18-19.

San Francisco Bay Test Case for 3-D Model Verification, Peter E. Smith, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p885-

Start-ups, CE May 94, p8.

Sand

1993 Ground-Water Flooding in the Havana Area, Adrian P. Visocky, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p608-

3-Dimensional Processes Along Sandy Beaches - Dimensions of a Coastal Facility, Ida Brøker, Hakeem Johnson, Erik Asp Hansen, Ann Skou, Peter Justesen and Rolf Deigaard, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p103-113.

Addendums to the Prediction Package, Robert Gibbens, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p86-91.

Behavior Prediction for Spread Footings on Sand, Sujit K. Bhowmik, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p245-248.

Biodegradation of Phenanthrene in Sand Columns in the Presence of Nonionic Surfactants, David Norris and Tariq Ahmed, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p360-367.

Building Performance Founded on an Improved Sand in Recife, Brazil, J. F. T. Jucá, A. O. C. Fonte and I. D. S. Pontes Filho, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1202-1213.

Class A Prediction of Shallow Footing Settlements, Harry G. Poulos, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p133-136.

Comparison of Settlement Predictions for Single Piles in Sand Based on Penetration Test Results, James B. Nevels and Donald R. Snethen, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1028-1038.

- A Comparison of Three Soil Improvement Techniques to Densify Liquefaction Susceptible Sands, Alec D. Smith and Edward B. Kinner, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1224-1236.
- Compressibility for Sand Under One-Dimensional Loading Condition, Ching S. Chang, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1298-1311.
- Creep Effects on Static and Cyclic Instability of Granular Soils, Poul V. Lade, GT Feb. 94, p404-419.
- Cyclic Threshold Shear Strains in Soils, Mladen Vucetic, GT Dec. 94, p2208-2228.
- Data and Prediction Request for the Spread Footing Prediction Event, Robert Gibbens and Jean-Louis Briaud, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), pl.1-85.
- Deformation of Sand Foundations Induced by Earthquakes, Xiangwu Zeng, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994, p726-739.
- Deformations in Sand Layer During Pile Driving, Francis D. Leathers, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p257-268.
- Development of a Long-Term Dredged Material Management Plan Chincoteague, Virginia, Tom B. Langley, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p359-367.
- Displacement of Landmark Building Resulting from Adjacent Construction Activities, Jacek K. Leznicki, Robert G. Gaibrois and Melvin I. Esrig, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p222-232.
- Dynamic Compaction of Saturated Silt and Silty Sand A Case History, Jean C. Dumas, Nelson F. Beaton and Jean-François Morel, (*In-Situ Deep Soil Improvement*, Kyle M. Rollins, ed., 1994), p80-89.
- Dynamic Lateral Pressures Due to Saturated Backfills on Rigid Walls, Isao Ishibashi, Makoto Osada and Tatsuo Uwabe, GT Oct. 94, p1747-1767.
- Earthquake-Induced Settlements in Silty Sands for New England Seismicity, Cetin Soydemir, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p77-90.
- Effects of Cyclic Lateral Loads on Piles in Sand, J. H. Long and Gheert Vanneste, GT Jan. 94, p225-244.
- Effects of SPT Equipment and Procedures on the Design of Shallow Foundations on Sand, William D. Kovacs, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p121-131.
- Estimation of Spread-Footing Settlement on a Sand Subgrade, John S. Horvath, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p145-148.
- Evaluation of Soil Liquefaction by Energy Principles, J. Ludwig Figueroa, Adel S. Saada, Liqun Liang and Nitin M. Dahisaria, GT Sept. 94, p1554-1569.
- Experimental Study of Debris Flows, Arbind Mainali and Nallamuthu Rajaratnam, HY Jan. 94, p104-123.
- Experimental Study of the Settlement of Shallow Foundations, Samuel Amar, François Baguelin, Yves Canépa and Roger Frank, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1602-1610.
- Footing Load Tests on Sand, Kenneth Tand, Erik Funegard and Pickett Warden, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p164-178.
- Fracture Behavior of Cement Grouted Sand, C. Vipulanandan, A. Ata and S. Mebarkia, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p147-159.

- Ground Movements from Model Tieback Wall Construction, Christopher G. Mueller, James H. Long, Edward I. Cording and David E. Weatherby, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1337-1352.
- Herbicide Leaching in a Coastal Plain Soil, W. F. Ritter, R. W. Scarborough and A. E. M. Chirnside, IR May/June 94 p634-649
- Interdependence of Beach Fill Volumes and Repetition Intervals, Hans-H. Dette, Alfred Fuehrboeter and Arved J. Raudkivi, WW Nov./Dec. 94, p580-593.
- Liquefaction Characteristics of Silts, Sukhmander Singh, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p105-116.
- Liquefaction of Artificially Filled Silty Sands, Susumu Yasuda, Kazue Wakamatsu and Hideo Nagase, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p91-104.
- Liquefaction of Silty Soils, Y. P. Vaid, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p1-16.
- Load Settlement curve Method for Spread Footings of Sand, Jean-Louis Briaud and Philippe Jeanjean, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1774–1804.
- Low-frequency Fluctuations of Suspended Sand and Wave Groups in the Surf Zone, R. D. Kos'yan, S. Yu. Kuznetsov and N. V. Pykhov, *Ocean Wave Measurement and Analysis*, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p352-363.
- Luo, Ming, Weilin Xu and Huasheng Liao, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1009-1013.
- Mechanisms of Shaft Friction in Sand from Instrumented Pile Tests, B. M. Lehane, R. J. Jardine, A. J. Bond and R. Frank, GT Jan. 93, p19-35.
- Missouri River Least Tern and Piping Plover Model Development, R. Tressler, R. Fairbanks, D. Latka, J. Glassley, K. Engel and J. Rude, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p750-753.
- Ocean Disposal with Capping of Dioxin Contaminated Sediment: New York Case History #1, Monte Greges, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1278-1284.
- On the Snow-Plough Effect when Cutting Water Saturated Sand with Inclined Straight Blades, S. A. Miedema, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p865-874.
- One- and Two-Dimensional Analysis of Flow in Hotophia Creek, MS, Yafei Jia and Carlos V. Alonso, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p589-594.
- Passive Earth Pressures with Various Wall Movements, Yung-Show Fang, Tsang-Jiang Chen and Bin-Ferng Wu, GT Aug. 94, p1307-1323.
- Post-Cyclic Consolidation Behavior of Loose Sands, J. C. Chern and C. C. Lin, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p740-747.
- Predicted and Measured Behavior of Five Spread Footings on Sand, Geotechnical Special Publication No. 41, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994, 0-7844-0025-3, 230pp.
- Predicted Load-Settlement Behavior of Spread Footings on Sand, Casan L. Sampaco, Loren R. Anderson, Joseph A. Caliendo, Abdel Agallouch, Hogan Chang, Chia-Ching Lin, Elhassan Elhassan, Kyle Gorder, Roger Greaves, Makarand S. Jakate, Won C. Kim, Arthur L. Moss and Darrin Sjoblom, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p232-235.
- Predicting Shallow Foundation Settlement in Sands from DMT, D. L. Skiles and F. C. Townsend, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p132-142.

Predicting the Settlement of the Texas A&M Spread Footings on Sand, G. Wiseman and J. G. Zeitlen, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p129-132.

Prediction of Low Level Vibration Induced Settlement, Dong-Soo Kim, Sergey Drabkin, Anatoly Rokhvarger and Debra Laefer, (Vertical and Horizontal Deforma-tions of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p806-817.

Prediction of Settlement for Five Footings, Ameir Altaee and Bengt H. Fellenius, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p206-

Prediction of Settlement of Footings on Sand, G. Mesri and M. Shahien, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p188-191.

Prediction of Settlements of Footings on Sands: Accuracy and Reliability, Riccardo Berardi and Renato Lancellotta, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p640-651.

Prediction of Shallow Foundation Settlement on Sand, Mazen E. Adib and Ramin Golesorkhi, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed.,

1994), p228-231.

Radiogenic Heavy Minerals as Tools in Selective Coastal Transport, R. J. de Meijer, I. C. Tánezos and C. Stapel, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p306-

Sand Filter Backwast Pit Criticality Analysis, Hans Toffer and David G. Erickson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p907-912.

Sandbar Formation in Side-Diversion Channels, Vincent Neary, Brian Barkdoll and A. Jacob Odgaard, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1171-1175.

Sandstone Materials Used as Riprap, Steven R. Abt, Mitchell R. Peters, Terry L. Johnson and Scott A. Hogan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p467-471.

Second Life for Spent Sand, CE Oct. 94, p8.

Seismic Settlement of Shallow Footings on Sands, Awad Al-Karni and Muniram Budhu, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p748-759.

Settlement Behavior of an Avalanche Protection Gallery Founded on Loose Sandy Silt, Walter Steiner, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p207-221.

Settlement of Footings on Granular Materials: Low and Large Strain Parameters, F. Ahtchi-Ali and J. C. Santamarina, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1287-1297.

Settlement of Shallow Foundations on Sand, Harvey E. Wahls and Mukesh Gupta, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p190-206.

Settlement of Spread Footings on Granular Soil, Chandra S. Brahma, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p160-163.

Settlement Predictions Footing Load Tests on Sand, Kenneth E. Tand and Pickett Warden, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994),

Settlement Predictions Footing Load Tests on Sand, Erik Funegard and Pickett Warden, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p199Setup and Relaxation in Glacial Sand, Donald L. York, Walter G. Brusey, Frank M. Clemente and Stephen K. Law, GT Sept. 94, p1498-1513.

Shallow Tunnels in Cohesionless Soil: Stability of Tunnel Face, Pierre Chambon and Jean-François Corté, GT July 94, p1148-1165.

Some Aspects of Determination of Pile Capacity by the Wave Equation, Mark R. Svinkin and Wondern Teferra, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p946-951.

Spread Footing Prediction Event, Ching L. Kuo and Sayed M. Sayed, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p219-223.

Spread Footing Settlement Prediction for ASCE Specialty Conference "SETTLEMENT '94", Jon R. Foshee, (Pre-dicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p186-187.

Spread Footing Settlement Prediction for the National Geotechnical Experimentation Site Prediction Event: Settlement '94, P. Cooksey, Q. Tang, M. Zhao, M. Mauldon and E. Drumm, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p173-176.

Stress and Settlement of Footings in Sand, Bengt H. Fellenius and Ameir Altaee, (Vertical and Horizontal De-formations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1760-1773.

Stress-Path Dependent Shear Strength of Sand, J. Feda, GT June 94, p958-974.

Subbottom Profiling of a Sand Capped Disposal Mound, Peggy Murray, Mary Wiley, Douglas Pabst and Brian May, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1285-1294.

Test and Prediction Results for Five Large Spread Footings on Sand, Jean-Louis Briaud and Robert Gibbens, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p92-128.

The Tip Displacement of Drilled Shafts in Sands, V. N. Ghionna, M. Jamiolkowski, S. Pedroni and R. Salgado, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1039-1057.

Towards a Rational Method of Predicting Settlements of Spread Footings on Sand, Martin Fahey, Peter K. Robertson and Ahmed A. Soliman, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p598-611.

Undrained Shear Strength of Liquefied Sands for Stability Analysis, Timothy D. Stark and Gholamreza Mesri, GT Nov. 92, p1727-1747.

Unified Critical-State Bounding-Surface Plasticity Model for Soil, Roger S. Crouch, John P. Wolf and Yannis F. Dafalias, EM Nov. 94, p2251-2270.

Utilization of Used Foundry Sand in Concrete, Tarun R. Naik, Viral M. Patel, Dhaval M. Parikh and Mathew P. Tharaniyil, MT May 94, p254-263.

Vapor Adsorption of Trichloroethylene on Quartz Sands of Varying Grain Size, David K. Kreamer, Karol J. Oja, S. Steinberg and Hugh Phillips, EE Mar./Apr. 94, p348-358.

Vertical and Horizontal Deformations for Foundations on Sand: An Experimental Study, Christos N. Marangos, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p179-189.

Vibration Induced Settlement From Blast Densification and Pile Driving, Charles H. Dowding, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1672-1688.

Vibratory Mobilization of Immiscible Liquid Ganglia in Sands, Lakshmi N. Reddi and Sreedhar Challa, EE Sept./Oct. 94, p1170-1190.

- WAK and Full-Scale Load Tests on Granular Fill, Kevin G. Sutterer, Karl W. Myers and Glenn J. Rix, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p153-163.
- Washing of Bentonite in Laboratory Hydraulic-Conductivity Tests, Denis Marcotte, Jean Claude Marron and Marcel Fafard, EE May/June 94, p691-698.
- West Columbus, OH LPP Gate Closure Analysis A Study of the Requirements for Multiple Closures, Kenneth C. Halstead and Surya Bhamidipaty, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p472-476.
- "Dynamic Compaction Used as a Winter Construction Expedient", Lawrence F. Johnsen and Christopher Tonzi, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p68-79.

Sand boils

Liquefaction Mechanism for Layered Soils, Gregg L. Fiegel and Bruce L. Kutter, GT Apr. 94, p737-755.

Sand filters

Filtration and Backwashing Performance of Biologically-Active Filters, A. Amirtharajah, Rasheed Ahmad, A. Al-Shawwa and P. M. Huck, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p178-185.

Sand transport

- Analysis of Sand Movement on Noto Coast by Geochemical Method, Kazumasa Mizumura, Toshiharu Nishimoto and Takahiko Yamamoto, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p923-927.
- The Continental Shelf: A Source for Naturally-Delivered Beach Sand, Robert H. Osborne, Kelly A. Ahlschwede, Sean D. Broadhead, Kyung Cho, Joshua R. Feffer, Arthur C. Lee, Jinyou Liu, Craig Magnusen, Janette M. Murrillo de Nava, Rory A. Robinson, Chia-Chen Yeh and Yi Lu, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p335-349.
- Cross-Shore Sand Transport Under Random Waves at SU-PERTANK Examined at Mesoscale, Magnus Larson and Nicholas C. Kraus, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p204-219.
- Directional Wave Data Measurements and Modeling Coast of Florida Erosion and Storm Effects Study, Thomas D. Smith and Jon M. Hubertz, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p76-89.
- Dredged Material Accumulation at a Dispersive Disposal Site, Mary Baker Wiley, Drew Carey, Thomas J. Fredette and W. F. Bohlen, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1172-1181.
- Magnetic Tracing of Beach Sand: Preliminary Results, Kuno D. van der Post, Frank Oldfield and George Voulgaris, (Coastal Dynamics '94, A. S.-Arcilla, ed., Stou-F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p323-334.
- New Design and Construction of Marinas in Israel, Rami Raviv, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p562-564.
- New Technology for Navigation Entrance Black River Canal, Larry Osborn, Kevin MacIntosh and Dave Werren, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p387-397.
- Study on the Sand Deposited Behind the Detached Breakwaters, Wen-Juinn Chen and Ching-Ton Kuo, (*Coastal Dynamics '94*, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p938-949.
- Velocity Moments on a Macro-Tidal Intermediate Beach, Yolanda L. M. Foote and David A. Huntley, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p794-808.

Sandbars

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Field Measurements in a Tidal River Estuary on the Cantabrian Coast, Spain, D. A. Huntley, M. A. Losada, R. Medina, C. Vidal and K. Stapleton, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p143–157.

The Influence of Boundary Conditions on Beach Zonation, Ignacio Alonso and Federico Vilas, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p417-431.

Instability of Sandbars in Grand Canyon, Muniram Budhu and Roger Gobin, HY Aug. 94, p919-933.

The Response of a Barred Coast to a Sequence of Storms, Felix C. J. Wolf, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p44-58.

The Role of Long Waves in Sand Bar Formation - a Model Exploration, Tim O'Hare, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed. 1994) n74-88

S-Archia, etc., Seve J. F. Watch, etc. and Nicholas C. Kraus, ed., 1994), p74-88.
 Three-Dimensional Behaviour of a Multiple Bar System, Kathelijne M. Wijnberg and Felix C. J. Wolf, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p59-73.

Sands

Model Tests on Caissons, Sreenivas Alampalli and Venkatanarayana Peddibotla, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p325-336.

Sandstor

Deformations About Excavations in Highly Stressed Rock, Paul Nash and Garry Mostyn, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1447-1459.

Sandwich laminates

Nonlinear Analysis of Angle-Ply Composite and Sandwich Laminates, T. Kant and J. R. Kommineni, AS July 94, p342-352.

Sandwich panels

- Elastic Constants for Z-Core Sandwich Panels, Tat-Ching Fung, Kang-Hai Tan and Tat-Seng Lok, ST Oct. 94, p3046-3055.
- Evaluation of Commercial Wood-Cement Composites for Sandwich-Panel Facing, Gebran N. Karam and Lorna J. Gibson, MT Feb. 94, p100-116.
- Hygrothermal Effects in Composite Sandwich Panels, Charles E. S. Ueng and Jonathan D. Sherrill, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p306-315.
- Three-Dimensional Solutions for Initially Stressed Structural Sandwiches, Ahmed K. Noor, Jeanne M. Peters and W. Scott Burton, EM Feb. 94, p284-303.
- Three-Dimensional Solutions for Thermomechanical Stresses in Sandwich Panels and Shells, W. Scott Burton and Ahmed K. Noor, EM Oct. 94, p2044-2071.

Sandwich structures

High-Order Bending of Sandwich Beams with Transversely Flexible Core and Nonparallel Skins, D. Peled and Y. Frostig, EM June 94, p1255-1269.

Thermoelastic Theory of Cylindrical Sandwich Shells with Piezoelectric Sensors or Actuators, Victor Birman, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p80-88.

Sanitary landfills

- Development of a Knowledge-Based System for Sanitary Landfill Design, H. Basri and E. I. Stentiford, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1257-1264.
- Moisture and Suction in Sanitary Landfills in Semiarid Areas, G. E. Blight, J. M. Ball and J. J. Blight, EE Nov./ Dec. 92, p865-877.

Sanitary sewers

Algorithm for Siphon-operated LPD Sewage Manifolds, Dennis L. Kaiser, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p424-438. Beneficial Use Alternatives for Water Treatment Plant Residuals, Ann M. Copeland, Carel Vandermeyden and David A. Cornwell, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p137-145.

Data Capture with GPS for Sewer Map Updates, John S.

Gresh and Rodolfo B. Fernandez, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1615-

Failure of Large Diameter High Density Polyethylene Sewer Pipe a Case in Point, Jey K. Jeyapalan and Joe A. Conner, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p356-371.

Flow Analysis Used to Diagnose Pipe Capacity and Sewer Overflow Problems in Sydney, Australia, Patrick A. Hayes, (Hydraulics of Pipelines, Deon T. Fowles, ed.

and Douglas H. Wegener, ed., 1994), p439-451. Local Sewer Rehabilitation - Metro Chicago, William A. Macaitis and Robert Kuhl, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drain age Rehabilitation Programs and Techniques, ASCE, 1994), p111-122.

Sewers and Computers, Rodolfo B. Fernandez and Brian W. Daniels, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p836-842.
Thermo-Hydrodynamic Modelling of the Chicago Sanitary

and Ship Canal, Ejaz Mohammad and Forrest M. Holly, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1306-1310.

Satellite communications

Determination of Look Angles to Geostationary Communi-cation Satellites, Tomás Soler and David W. Eisemann,

SU Aug. 94, p115-127

A Satellite Based River Forecast System for the Nile River, Victor Koren and Curtis B. Barrett, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p9-12.

Satellite mapping

Data Capture with GPS for Sewer Map Updates, John S. Gresh and Rodolfo B. Fernandez, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1615-1622

GPS Mapping Van Hits the Road, CE Dec. 94, p11-12.

Calibration of a Highway Traffic Assignment Model for the Manhattan Central Business District, V. Papayannoulis, J. C. Falcocchio and L. Maynus, (Com Civil Engineering, Khalil Khozeimeh, ed., 1994), p720-

A Conceptual Study of A Solar Power Satellite Using Cen-Conceptual study of A Solar Power Saetthe Csing Centrifugal Force, Hiroshi Yamakawa, Hiroshi Kanamori, Kenji Nozaki, Takeo Oura, Takanori Sato, Hisahito Tadokoro, Kenji Takagi, Hiroshi Ueno, Koji Oishi, Haruyuki Namba and Shinji Matsumoto, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p57-63.

Determination of Look Angles to Geostationary Communi-cation Satellites, Tomás Soler and David W. Eisemann,

SU Aug. 94, p115-127.

GPS Goes Real Time, Carl W. Sumpter and Gregory W. Asher, CE Sept. 94, p64-66.

GPS-Based Control for Space Vehicle Rendezvous, Kurt R. Zimmerman and Robert H. Cannon, Jr., (Robotics for Challenging Environments, Laura A. Demsetz, ed. and

Paul R. Klarer, ed., 1994), p61-69. The Great Lakes Forecasting System: An Overview, Keith W. Bedford and David J. Schwab, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p197-201.

Impact of GOES Data on Surface Heat Flux Predictions, Yi-Fei P. Chu, Keith W. Bedford, Carolyn J. Merry and Jay S. Hobgood, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p212Living in Space, Michael Wifall, (Engineering, Construc-tion, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p842-845.

Money-Saving Model, Carson Mettel, David McGraw and Susanne Strater, CE Jan. 94, p54-56.

Monitoring and Modeling the Transport of Coarse Single Particles in Mountain Rivers, Peter Ergenzinger and Carmen de Jong, (Hydraulic Engineering '94, George Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p634.

NASA's Mission to Planet Earth: Will Civil Engineering Reap Benefits? John H. McElroy, El Oct. 94, p401-404.

Observations of Wind Wave Growth by ERS-1 SAR, Chich Y. Peng and Antony K. Liu, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p934-942

Overview of Space Environmental Effects, Alan J. Watts, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p628-637.

A Practical Application of Concession Schemes to Space Energy Projects, Michel Lyonnet du Moutier, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p658-667.

Satellite Observations of Wave Heights in Arabian Sea and Bay of Bengal, Usha Natesan and S. P. Subramanian,

WW Nov./Dec. 94, p576-579.

Solar Power Satellites, Sean Russell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p793-798

A Sonobuoy-Sized Expendable Air-Deployable Directional Wave Sensor, Marshall D. Earle, Ralph H. Orton, Harry D. Selsor and Kenneth E. Steele, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p302-315.

Strategic Ship Routing Impacts of Temporal Coverage with Real-time Satellite Altimeter-Based Current Information, Young-Kyun Lee, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p483-489.

Synthetic Estimation of Development Cost of Satellite, Yi-In Zhu, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1512-1520.

Use of GPS for Tethered Satellite Position Determination, Bjorn L. Johns and George W. Morgenthaler, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p64-79.

Using a Small Satellite Bus As a Dedicated Platform for On-Orbit CSI Experiments, Andrew S. Bicos and Gregory G. Loboda, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p37-46.

Constraining Local 3-D Models of the Saturated-Zone, Yucca Mountain, Nevada, G. E. Barr and Sharon A. Shannon, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1814-1821.

Frost Susceptibility of Concrete in Near-Saturated States, B. V. Enüstün, K. S. Soo and K. L. Bergeson, MT May

94, p290-306.

Hydration of Aluminate Cements, Pierre Barrett and Danielle Bertrandie, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p132-174.

Mathematical Modeling of Saturated-Unsaturated Flow to Drains, Saleem Ahmad, Deepak Kashyap and B. S. Mathur, IR Jan./Feb. 93, p18-33.

Modeling a Ponded Infiltration Experiment at Yucca Mountain, NV, David B. Hudson, Alan L. Flint and Wil-liam R. Guertal, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2168-2174.

Modeling Flow in Variably-Saturated Porous Media, S. P. Shrestha and G. V. Loganathan, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p429-432.

Modeling Infiltration Into a Tuff Matrix From a Saturated Vertical Fracture, Clifford K. Ho, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1897-1904. Review of Wetting-Induced Collapse in Compacted Soil,

Evert C. Lawton, Richard J. Fragaszy and Mark D. Heth-

erington, GT Sept. 92, p1376-1394.

Saturation and Gas Migration Within Clay Buffers, Peter Grindrod, Michael Impey, Syra Saddique and Hiroyasu Takase, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2069-2075

Saturation Levels and Trends in the Unsaturated Zone, Yucca Mountain, Nevada, Philip H. Nelson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2774-2781. Swell versus Saturation for Compacted Clay, Robert W.

Day, GT Aug. 92, p1272-1278.

Saudi Arabia

Asphalt Pavement Temperature Related to Arid Saudi En-vironment, H. I. Al-Abdul Wahhab and F. A. Balghunaim, MT Feb. 94, p1-14

Building Construction Detailed Estimating Practices in Saudi Arabia, Kamal M. Al-Harbi, David W. Johnston and Habib Fayadh, CO Dec. 94, p774-784.

Management of Recharge Dams in Saudi Arabia, Fouad F. Al-Muttair, Uygur Sendil and Abdulaziz S. Al-Turbak, WR Nov./Dec. 94, p749-763.

Scale effect

Large-Scale Loading Tests of Shallow Footings in Pneu-matic Caisson, Osamu Kusakabe, Yoshito Maeda and

matic Caisson, Osanin Kusataler, Toshino Maeda aini Masatoshi Ohuchi, GT Nov. 92, p1681-1695. Scale and Modeling Effects in Concrete Armor Experi-ments, Jeffrey A. Melby and George F. Turk, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p686-700.

Scaling Laws in Mechanics of Failure, Zdeněk P. Bažant, EM Sept. 93, p1828-1844.

Analysis of Prototype Long Period Waves for Los Ange-les/Long Beach Harbor Resonance Studies, William C. Seabergh, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p15-27.

Evaluation of Thermo-Hydrological Performance in Sup port of the Thermal Loading Systems Study, Thomas A. Buscheck, John J. Nitao and Steven F. Saterlie, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p592-610.

Model-Prototype Conformance of a Submerged Vortex in the Intake of a Vertical Turbine Pump, K. Warren Frizell, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p482-489.

Near-Field Thermal Calculations for Individual Waste Package Placement, Suresh Lingineni, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p611-618.

A New Laboratory for Teaching Structural Engineering, Richard A. Behr and David S. Vollenweider, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p321-326.

Non-Intrusive Experimental Setup for Inflatable Dam Models, T. A. Economides and D. A. Walker, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p500-508.

Preliminary Analysis of Three-Dimensional Moisture Flow Within Yucca Mountain, Nevada, Gudmundur Bodvarsson, Gang Chen and Caroline Wittwer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2038-2047.

Recent Developments in the Robotic All Terrain Lunar Ex-Recent Developments in the Robotic All Terrain Luniar Exploration Rover (RATLER) Program, P. R. Klarer, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p202-209.

Riprap Sizing for Modified ARS-Type Basin, Steven R. Abt, Glenn B. Hamilton, Chester C. Watson and John Smith Life Let March 267 267.

Smith, HY Feb. 94, p260-267.

Scaling Behavior of Gas Permeability Measurements in Volcanic Tuffs, Vincent C. Tidwell, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p2500-2509.

Terrestrial Analogs: Implications for Lunar Lava Tubes, Cassandra R. Coombs and B. Ray Hawke, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1138-

Scanning electron microscopes

Mineral Liberation and Beneficiation of Lunar High-Ti Mare Basalt, 71055: Digital-Imaging Analyses, John G. Chambers, Lawrence A. Taylor, Allan Patchen and David S. McKay, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p878-888.

Scattering

The Levitation of Lunar Dust Via Electrostatic Forces, S. Doe, J. O. Burns, D. Pettit, J. Blacic and P. W. Keaton, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p907-915.

Optical Scatter From a Space Craft Mirror Due to Microscopic Impacts, Lawrence B. Crowell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p368-377.

Wave Scattering by Submerged Porous Disk, Allen T. Chwang and Jianhua Wu, EM Dec. 94, p2575-2587.

Scheduling

Alternative Decisions for Space-Based Scheduling in Multi-Story Projects, Walid Y. Thabet and Yvan J. Beliveau, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1164-1171.

Beyond CPM: The Deck-of-Cards Paradigm, Francois Grobler, K. Praveen Reddy and Carol Subick, (Comput-ing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2046-2053.

Case Storage of Planning Knowledge for Power Plant Construction, Ren-Jye Dzeng and Iris D. Tommelein, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p293-300. Contemporaneous Development of Field Data: Transporta-

tion Construction Claim Defense, Kenneth H. Dunne and George Navarrete, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2124-2135.

CPM/LOB: New Methodology to Integrate CPM and Line of Balance, Saad A. Suhail and Richard H. Neale, CO

Sept. 94, p667-684.

Design and Implementation of an Optimal Real-Time Hydropower Generation Scheduling System for the Lower Colorado River in Texas, Quentin W. Martin, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p169-

Development of Hydro-Scheduling Model for Optimal Joint Operation of Multi-Reservoir Systems, S. B. Shim, J. W. Labadie, H. S. Lee, D. K. Koh and K. D. Shim, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

Developments to the IRMA Model of AEC Projects, Thomas Froese, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p778-785.

McDonough, Patrick A. McGeehin and Steven Kmieciak, Oredging '94, E. Clark McNair, Jr., ed., 1994), p1305-1314.

Early-Completion Schedules: The Promise and Pitfalls, Roy Mendelsohn, ME Jan./Feb. 94, p28-30.

Establishing Management Information Systems for Mul-tiproject Programs, Russell Zapalac, Karen Kuemmler and Tim Malagon, ME Jan./Feb. 94, p37-42.

Evaluation of Roof Sheathing Fastening Schedules for High Wind Uplift Pressures, Thomas P. Cunningham, Jr., (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p330-339.

Facilitate Delay Claim Analysis with As-Built Schedule Databases, John R. Knoke and Gary H. Jentzen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1904). 1994), p2104-2111.

Fuzzy Modus Ponens Deduction Technique for Construc-tion Scheduling, Ricky Wai-Kin Wu and Fabian C. Hadipriono, CO Mar. 94, p162-179.

Geometric-Based Reasoning System for Project Planning, A. A. Morad and Y. J. Beliveau, CP Jan. 94, p52-71.

Historical, Current and Upcoming Regulation Schedules for Lake Okeechobee, Vinio Floris, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p53-56.

HVLS: Horizontal and Vertical Logic Scheduling for Multistory Projects, Walid Y. Thabet and Yvan J. Beliveau, CO Dec. 94, p875-892.

An Integrated Approach To Repetitive Construction Planning, Boliver A. Senior and Daniel W. Halpin, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p25-32

An Integrated Computer Model for Project Schedule Up-dating, Walid Y. Thabet and Ayman A. Morad, (Com-puting in Civil Engineering, Khalil Khozeimeh, ed., 1994), p743-750.

Integrated System for Managing Owner-Directed Project Acceleration, Nagui I. Riad, David Arditi and Jamshid

Mohammadi, CO Mar. 94, p77-95.

Interactive Decision Support System for Building Con-struction Scheduling, K. E. E. Kähkönen, CP Oct. 94, p519-535.

Modeling Work Space to Schedule Repetitive Floors in Multistory Buildings, Walid Y. Thabet and Yvan J. Beliveau, CO Mar. 94, p96-116.

MoveCapPlan: In Integrated System for Planning and Con-trolling Construction Material Laydown and Handling, I. D. Tommelein, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1172-1179.

A Multi-Media System for Organizing Construction Documents, Rajaram Ganeshan, Simon Kim, Liang Liu and Annette Stumpf, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1381-1388. Multi-Objective Optimization of Construction Schedules,

Tadeusz Kasprowicz, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p185-190.

An Object-Oriented Scheduling Data Acquisition Model Using a Hybrid Expert System, Kyungrai Kim, Calin M. Popescu and Gary D. Hamilton, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p356-361.

Optimal Pump Operations Considering Pump Switches, Kevin E. Lansey and Kofi Awumah, WR Jan./Feb. 94, p17-35.

A PC-Based Stochastic Project Scheduling and Costing Module, Kamalain K. Sha'ath and Gurdev Singh, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p9-16.

Probabilistic Modeling of Scheduling Uncertainty: Methods and Tools, Ali Touran, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p380-383.

Representation of Vertical Constraints Knowledge for Scheduling Multi-Story Projects, Walid Y. Thabet and Yvan Beliveau, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p349-355.

SCHEREC: SCHedule RECovery System, Feniosky Pêna, Robert Logcher, Naoto Mine and Timothy McManus, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p17-24.

Selecting Precast Concrete Building Systems, John I. Mess-ner, Victor E. Sanvido and Masaaki Ikeda, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

Soil Water Model for Evaluating Water Delivery Flexibility, Sophie Lamacq and Wesley W. Wallender, IR July/ Aug. 94, p756-774.

Startplan: Producing Schedule Templates Using IRMA, Thomas Froese and Qiang Kevin Yu, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p63-

Streamlining Project Estimating and Scheduling, David Angelotti, CC Feb. 94, p11-13.

Time-Space Tradeoff Strategies for Space-Schedule Construction, Pierrette P. Zouein and Iris D. Tommelein, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1180-1187.

Using Computer Programs to Develop As-Built Schedules, Jason M. Jazayeri, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p191-196.

Water Conservation and Delivery Flexibility in the Imperi-al Irrigation District Through Lateral Interceptor Sysat Irrigation District Intologic Lateral Interceptor Sys-tems, Eduardo A. Latimer, Robert W. Charley, Todd Hunziker, Andrew A. Keller and Doug Welch, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p335-338.

We'd do it Again, Say Partnering Vets, ME July/Aug. 94, p11.

Schools AIA Awards Celebrate the Old and the New, CE Apr. 94, p14.

High-Level Radioactive Waste Curriculum Usage, Evalua-tion, and Customer Focus, Ginger P. King, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p104-111.

Hurricane Shelter Design Criteria for Public Schools, A Shanker, R. Wayne Drummond, Raja R. Issa and Kalika Wamanacharya, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p233-240

A New Approach to Water Education: Children's Water Festivals, Darell D. Zimbelman and Brian R. Werner, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

p762-765.

Shelters for Hurricane Refuge, Herbert S. Saffir, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p241-248.

Scintillation counters

Development of Functional Characteristics of Vehicle Mounted Plastic Scintillation System, John G. Follette, Jeffrey J. Tappen and Christopher T. Briggs, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1964-1970.

Scour

Behavior of Hydraulic Jump Basins, Boualem Hadjerioua, Emmett M. Laursen and Margaret S. Petersen, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p416-420.

Bridge Pier Scour Equations - An Assessment, Alimul Qadar and Sarfaraz A. Ansari, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p61-67.

Bridge Pier Scour with Debris Accumulation, Bruce W. Melville and D. M. Dongol, HY Sept. 92, p1306-1310. Bridge Scour During the 1993 Floods in the Upper Missis-

sippi River Basin, Gordon G. Barksdale, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p21-25.

Bridge Scour Instrumentation, P. F. Lagasse, E. V. Richardson and S. A. Sabol, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p36-40.

Prief Summary of National Bridge Scour Data Base, Mark N. Landers, J. Sterling Jones and Roy E. Trent, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p41-45.

Clear-Water Scour around Abutments in Floodplains, Terry W. Sturm and Nazar Sadiq Janjua, HY Aug. 94,

p956-972.

Clear-Water Scour around Bridge Pier Group, Nandana Vittal, U. C. Kothyari and Morteza Haghighat, HY Nov. 94, p1309-1318.

Contraction Scour at a Bridge over the Iowa River, Edward E. Fischer, (Hydraulic Engineering '94, George V Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p31-35. Demonstration Project for Scour Instrumentation, J. D.

Schall, W. R. Ivarson and T. Krylowski, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p37-42.

Dredged Material Used in Sand-filled Containers for Scour and Erosion Control, Lee E. Harris, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p537-546.

Drop Height Influence on Outlet Scour, Frederick K.
Doehring and Steven R. Abt, HY Dec. 94, p1470-1476.

Effect of Pier Geometry on Scour in Graded Gravels, Luis Ayala and Francisco Grandón, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p73-77.

Effects of Flow Duration on Local Scour at Bridge Piers in New York, Gerard K. Butch and Richard Lumia, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p46-50.

Estimation of Spillway Free Jet Trajectory Lengths, Peter J. Rae and Diana Hurdowar-Castro, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p421-425.

Expert System for Bridge Scour and Stream Stability, Suzanne Pollon, Lea Adams, Richard Palmer and George Turkiyyah, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p.1389-1396.

Field Performance of an Acoustic Scour-Depth Monitoring System, Robert R. Mason, Jr. and D. Max Sheppard, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p366-375.

Force and Pressure Measurements in Spillway Plunge Pools, Peter J. Rae, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p553-557.

Kent, Edward, John Richardson and Vijay Panchang, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p56-60.

Local Scour Due to Submerged Horizontal Jet, S. S. Chatterjee, S. N. Ghosh and M. Chatterjee, HY Aug. 94, n973, 902

Description of the property of the property

Low-Cost Bridge Scour Measurements, J. D. Schall, J. R. Richardson and G. R. Price, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p114-118.
A Mechanism of Pool Formation and Maintenance in Formation and Maintenance in Formation.

A Mechanism of Pool Formation and Maintenance in Forest Streams, Richard D. Smith and Robert L. Beschta, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p824-828.

Monte Carlo Simulation for Correlated Variables with Marginal Distributions, Che-Hao Chang, Yeou-Koung Tung and Jinn-Chuang Yang, HY Mar. 94, p313-331.

On the Erodibility of Rock and Other Earth Materials, George W. Annandale and Hendrik A. D. Kirsten, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p68-72.

Plunge-Pool Scour by Inclined Jets, Assem M. Afify and Gilberto E. Urroz, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1040-1044.

Practical Method for Calculating Contraction Scour, E. V. Richardson and J. R. Richardson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p6-10.

Practical Method for Scour Prediction at Bridge Piers, J. R. Richardson and E. V. Richardson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), pl-5.

Real-Time Data Collection of Scour at Bridges, David S. Mueller and Mark N. Landers, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p104-113.

Reliability-Based Pier Scour Engineering, Peggy A. Johnson, HY Oct. 92, p1344-1358.

Riprap Criteria below Pipe Outlet, Mahmood Shafai-Bajestan and Maurice L. Albertson, HY Feb. 93, p181-200

Scour Hole Depth Downstream of the SAF stilling Basin, M. Shafai-Bajestan, A. Sayahi and M. L. Albertson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1045-1049.

Sediment Concentration below Free Overfall, O. R. Stein and P. Y. Julien, HY Sept. 94, p1043-1059.

Sensitivity Analysis of Bridge Equations, Jeffrey S. Glenn, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p11-15.

Timber Pile Length Determination Using a Nondestructive Technique, Robert T. Brooks and Allan G. Burk, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p952-957.

Toe Scour Protection Methods, Stephen T. Maynord, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1035-1039.

Ultimate Depth of Scour Around Bridge Piers, Sarfaraz A. Ansari and Alimul Qadar, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p51-55.

Use of HEC-2 and HEC-6 to Determine Levee Heights and Revetment Toe Scour Depths, David T. Williams and David Cozakos, (Hydraulie Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1075-1079.

Scouring

Migration of Backward-Facing Step, Hong-Yuan Lee and Shie-Tsung Hwang, HY June 94, p693-705.

Scrubbers

Meeting 503 Regulations for Ten Biosolids Incinerators (And Associated Stories), Mark Prentice, Norman LeBlanc, Thomas E. Sadick and F. Michael Lewis, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p114-121.

Sea floor

Sea noor

Construction of an Island, Brendan Bambrick, CO Mar. 94, p223-227.

The Dioxin Capping Project at the NY Mud Dump Site, Scott McDowell, Brian May and Douglas Pabst, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1270-1277.

iea state

Breaking Wave Measurement by a Void Fraction Technique, Ming-Yang Su and John Cartmill, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p951-962.

Case Studies of Extreme Wave Analysis: A Comparative Analysis, Gerbrant van Vledder, Yoshimi Goda, Peter Hawkes, Etienne Mansard, Maria Jesus Martin, Martin Mathiesen, Eric Peltier and Edward Thompson, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p978-992.

Effects of Sea Surface Movement on Offshore Structures, G. D. Hahn, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1478-1483.

On Hurricane-Generated Seas, Michel K. Ochi, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p374-387.

Sea walls

Beach Nourishment in Presence of Seawall, Robert G. Dean and Chul-Hee Yoo, WW May/June 94, p302-316.

Dredged Material Used in Sand-filled Containers for Scour and Erosion Control, Lee E. Harris, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p537-546.

Review of Works Using CRIEPI Flume and Present Work, Ryoichi Kajima and Tsutomu Sakakiyama, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p614-627.

Simulation of Wave and Beach Profile Change in SUPER-TANK Seawall Tests, William G. McDougal, Nicholas C. Kraus and Harman Ajiwibowo, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p278-295.

Tahoe Walls Anchored Quickly and Cleanly, CE Jan. 94,

Wave Impacts on Sea Walls and Breakwaters, A. R. Crawford, M. J. Walkden, P. A. D. Bird, G. N. Bullock, P. J. Hewson and J. Griffiths, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p656-670.

Wave Run-Up and Reflection on a Permeable Sea Wall. Mitsuo Takezawa, Susumu Kubota and Shintaro Hotta, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p680-

Wave Setup Near a Seawall: Experiments and a Numerical Model, K. A. Rakha and J. W. Kamphuis, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p835-848.

Sea water

Colloidal Fouling of Reverse Osmosis Membranes, Menachem Elimelech and Xiaohua Zhu, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p329-335.

The Significance of Hydrodynamic Forces in Coastal Embankment Design, Bang-Fuh Chen, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p880-889.

Evaluation of Silane Sealer Application on Concrete, Doran L. Glauz and Vijay K. Jain, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p155-162.

Field Evaluation of Concrete Pavement Joint Sealants in Utah, Timothy D. Biel, Hosin Lee, Sherm Hopson and David Eixenberger, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p147-154.

Performance of Fuel-Resistant Sealers for Asphalt Concrete Pavements, James E. Shoenberger, MT Feb. 94, p137-149.

Sealant Coats Building During Windy City Winter, CE Feb. 94, p77.

The Case for Retrievable High-Level Nuclear Waste Disposal, Eugene H. Roseboom, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1774-1781

Clay Plugs Seal Liner Leaks, ET June/July 94, p1,4.

Qualification Leak Testing of the GA-4 and GA-9 Closure Seal Design, Richard H. Boonstra, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p923-930.

Undersealing of Portland Cement Concrete Pavements: Does it Work? Ramzi Taha, Tom Papagiannakis and Ali Selim, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p163-169.

Seasonal variations

1993 Recreational Vehicle (RV) Park Census in Beatty and Pahrump, Nevada, Lloyd E. Levy and Marcia D. Housel, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

Modeling the Seasonal Circulation in Massachusetts Bay, Richard P. Signell, Harry L. Jenter and Alan F. Blumberg, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p578-

Seasonal Variation of Resilient Modulus of Subgrade Soils, Myung S. Jin, K. Wayne Lee and William D. Kovacs, TE July/Aug. 94, p603-616.

Anton Tedesko, Designer of Major Engineering Structures in Concrete and Steel, Dies at 90, NE May 94, p5.

Eagle Harbor Superfund Project, Eric E. Nelson, Amy I Venderheiden and A. David Schuldt, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1122-1131.

Evaluation of Remedial Options for the Sitcum Waterway Sediments: A Case Study, John R. Verduin, III, Garry E. Horvitz and Richard C. Gilmur, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p555-566.

Nearshore Confined Disposal in a Tidally-Influenced Enviearsnore Confined Disposal in a Triany-Influence Zarr-ronment—Design and Operation Experience in Puget Sound, Douglas A. Hotchkiss and Charles D. Boatman, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1260-1269

Nighttime Cement Concrete Pavement Replacement Seattle-Tacoma International Airport, Jo A. Lary and John Rothnie, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p92-101. Roofless in Seattle, CE Sept. 94, p8.

Steam Plant Becomes Biotech Lab. Terry Lundeen, Todd Perbix and John Schwartz, CE Sept. 94, p44-47.

Secondary flow

Field Measurements of Secondary Currents in Straight Riv-ers, Ichisa Nezu, Akihiro Tominaga and Hiroji Nakagawa, HY May 93, p598-614.

On Some Hydrodynamic Effects Found in Large Scale Experiments, Nikolai S. Speranski, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p785-793.

Velocity Distribution in Compound Channel Flows by Numerical Modeling, Giuseppe Pezzinga, HY Oct. 94, p1176-1198.

Secondary systems

Effects of Gravity Currents in Circular Secondary

Clarifiers, C. van Marle and C. Kranenburg, EE July/ Aug. 94, p943-960.

Energy-Based Dynamic Analysis of Secondary Systems, Genda Chen and T. T. Soong, EM Mar. 94, p514-534.

Evaluating Activated Sludge Secondary Clarifier Performance: A Protocol, E. J. Wahlberg, M. Augustus, D. T. Chapman, C. Chen, J. K. Esler, T. M. Keinath, D. S. Parker, R. J. Tekippe and T. E. Wilson, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p209-216.

anu mare Euwarus, ed., 1994), p209-216. First-Passage Time of Secondary System Mounted on Yielding Structure, David C. K. Chen and Loren D. Lutes, EM Apr. 94, p814-834. Nonlinear Stochastic Response and Reliability of Secondary Systems, C. D. Huang, W. Q. Zhu and T. T. Soong, EM Jan. 94, p177-196.

Optimizing Secondary Clarifier Performance: A Presenta-tion Outline, John K. Esler, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p202-208.

Automated Sensor Tester, Dave Hayward, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p158-165.

Autonomous Navigation for Structured Exterior Environ-ments, J. Bryan Pletta, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p79-87.

Avoiding Dual Regulation of the Civilian Radioactive Waste Management Program, John G. Vlahakis and Ricardo J. Palabrica, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1593-1596.

Concerns, Worries, and Wringing of Hand (Part 1), Charles S. Hodge, CC Jan. 94, p12-13.

Sediment

Biological and Physical Characterization of a Deep-Ocean Disposal Site off Northern California, James A. Blake, Catherine A. Courtney, Barbara Hecker, Brigitte Hilbig, Jo Ann Muramoto and Donald C. Rhoads, (*Dredging* '94, E. Clark McNair, Jr., ed., 1994), p111-120.

Capping Contaminated Sediments - The Theoretical Basis and Laboratory Experimental Evidence for Chemical Containment, L. J. Thibodeaux, K. T. Valsaraj and D. D. Reible, (Dredging '94, E. Clark McNair, Jr., ed., 1994),

Contaminated Dredged Sediment Disposal Criteria, G. Fred Lee and Anne Jones-Lee, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p121-130.

Delineating Limits of Remediation for Heavy Metal Contaminated Sediments in River and Cove Areas, Gregory P. Matthews and Thomas M. Simmons, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1240-1249.

E. Cark McNaul, Jr., ed., 1993), p1240-1249.
 Demonstration of Pneuma Dredging Technology, Giovanni Faldi and Timothy L. Gahring, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1047-1049.
 The Dioxin Capping Project at the NY Mud Dump Site, Scott McDowell, Brian May and Douglas Pabst, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1270-1277.

Disposal of Contaminated Sediments in NY/NJ Harbor, Joel A. Pecchioli, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p606-615.

Disposal Site Capping Management: New Haven Harbor, Thomas J. Fredette, (*Dredging '94*, E. Clark McNair, Jr.,

ed., 1994), p1142-1151 Eagle Harbor Superfund Project, Eric E. Nelson, Amy L. Venderheiden and A. David Schuldt, (Dredging '94, E.

Clark McNair, Jr., ed., 1994), p1122-1131.
Effect of Flow Velocity on Sediment Oxygen Demand:
Theory, Yoshiyuki Nakamura and Heinz G. Stefan, EE

Sept./Oct. 94, p996-1016.

Sept. Coc. 94, p.990-1010.

Estimating Sediment Relative Density Using an Impact
Core Sampler and Wave Equation-based Pile Analysis,
James M. Schmidt and Donald E. Bruggers, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1212-1219.

Evaluating Methods for Statistical Analysis of Less than Detection Limit Data Using Simulated Small Samples 2. General Results, Joan U. Clarke, (*Dredging '94*, E. Clark

McNair, Jr., ed., 1994), p747-755. Evaluation of Remedial Options for the Sitcum Waterway Sediments: A Case Study, John R. Verduin, III, Garry E. Horvitz and Richard C. Gilmur, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p555-566. Evolution of Cable Arm Clamshell Bucket, J-P. Pelletier,

R. Santiago and J. Lajeunesse, (Dredging '94, E. Clark

McNair, Jr., ed., 1994), p1050-1060.

A Framework for the Environmental Risk Assessment of Contaminated Sediments, Tom M. Dillon, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p141-149.
Fundamentals and Advancements in Hydraulic Measure-

ments and Experimentation, Clifford A. Pugh, ed., 1994,

0-7844-0036-9, 546pp. Groundwater Model Simulation of Chemical Transport from a Nearshore Confined Sediment Disposal Facility, Michael Riley, Gopal Biswas, Charles Boatman, Robert Brockhaus, Mark Utting and Doug Hotchkiss, (*Dredging* '94, E. Clark McNair, Jr., ed., 1994), p1517-1526.

In-Situ Treatment of Hazardous Sediment, Lyman Wible, Stacy McAnulty, Robert Stanforth, Ajit Chowdhury and Mick Warner, (*Dredging '94*, E. Clark McNair, Jr., ed.,

1994), p468-473.

Influence of a Sand Layer on Headcut Advance, Kerry M. Robinson and Gregory J. Hanson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p431-435.

Instantaneous-Unit Sediment Graph, N. S. Raghuwanshi, R. A. Rastogi and Santosh Kumar, HY Apr. 94, p495-

503.

Laboratory and Field Demonstrations of Sediment Treatment Technologies by the USEPA's Assessment and Remediation of Contaminated Sediments (ARCS) Program, Stephen Garbaciak, Jr., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p567-578.

LADS System, Inc. Thermal Remediation Treatment for Contaminated Sediment, Vladimir Shepsis, Nancy L. Case and Gregory L. Hartman, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p66-75.

Leachate Testing and Evaluation for Freshwater Sediments, James M. Brannon and Tommy E. Myers, (*Dredging* '94, E. Clark McNair, Jr., ed., 1994), p737-746.

Monitoring of Water Injection Dredging, Dredging Pollut-ed Sediment, W. G. Borst, Joh. G. S. Pennekamp, H. Goossens, A. Mullié, P. Verpalen, T. Arts, P. F. van Dreumel and W. D. Rokosch, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p896-905.

NCASI Experiment Related to Validation of Equilibrium Partitioning (EP) Theory, Steven W. Hinton, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p737-742

New Bedford Harbor, Massachusetts Dredging/Disposal of PCB Contaminated Sediments, Mark J. Otis, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p579-587.

Ocean Disposal with Capping of Dioxin Contaminated Sediment: New York Case History #1, Monte Greges,

(Dredging '94, E. Clark McNair, Jr., ed., 1994), p1278-1284.

Petroleum Hydrocarbons in Detention-Basin Sediments, Thomas J. Maldonato and Christopher G. Uchrin, EE May/June 94, p683-690. Phased and Layered Sampling for Navy Dredging, Sherry L. Ashbaugh, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1436-1440. Physical Design Aspects of Capping Projects, James E. Clausner, (Dredging '94, E. Clark McNair, Jr., ed., 1904), p132113211431

1994), p1132-1141.

Pilot-Scale Demonstration of Sediment Washing, Jim E. Galloway and Frank L. Snitz, (Dredging '94, E. Clark

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E. Clark McNair, Jr., ed., 1994), p596-605.

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- Principal Components Time Spectra of Suspended Sediment in Random Waves, Onyx W. H. Wai, Keith W. Bedford and Sean T. O'Neil, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p296-305.
- Procedures for Evaluating the Effects of Sedimentation on Flood Hazards in Urbanized Areas in the Southwesten U.S. R. A. Mussetter, P. F. Lagasse, M. D. Harvey and C. A. Anderson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p425-428.
- Real-Time Data Collection of Scour at Bridges, David S. Mueller and Mark N. Landers, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p104-113.
- Recent Improvement of Gao Qiao New Channel on Huangpu River, Guoxian Zhu, WW July/Aug. 94, p368-381.
- Reliability and Validity of Modeling Sedimentation and Debris Flow Hazards Over Initially Dry Areas, Douglas L. Hamilton, Robert C. MacArthur and Vito A. Vanoni, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p342-356.
- The Role of Long Waves in Sand Bar Formation a Model Exploration, Tim O'Hare, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p74-88.

Sandbar Formation in Side-Diversion Channels, Vincent Neary, Brian Barkdoll and A. Jacob Odgaard, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), pl 171-1175.Sediment Concentration below Free Overfall, O. R. Stein

and P. Y. Julien, HY Sept. 94, p1043-1059.

Sediment Dispersion and Footprint Modeling Initial Char acterization at a Deep Disposal Site, Albert Mills Soldate, Jr. and Kim A. Brown, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p103-110.

Sediment Feed and Recirculating Flumes: Fundamental Difference, Gary Parker and Peter R. Wilcock, HY Nov.

93, p1192-1204.

Sediment Modeling in the Rio Grande Conveyance Channel, Drew C. Baird and Cassie C. Klumpp, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1151-1155.

Sediment Transport Analysis Rio Grande Floodway at San Marcial Gauge, Mohammed A. Samad, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1115-1119.

Sediment Transport by Wind Waves, Long Waves and Mean Currents: An Experiment on Nearshore Morpho-dynamics, Lake Huron, Canada, Troels Aagaard and Brian Greenwood, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p14-28.

Sediment Transport in Sewers and Design Implications, Chandramouli Nalluri and Aminuddin Ab Ghani, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p933-938.

Sediment Transport Measurements in Combined Wave-Current Flows, I. Katopodi, J. S. Ribberink, P. Ruol and C. Lodahl, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p837-851.

Sediment Transport Under Wave-Current Interaction on Sediment Fransport Under Wave-Current Interaction of Macro-Tidal Beaches, Franck Levoy, Olivier Monfort and Hélène Rousset, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholac C. Kraus, ed., 1994), p727-741.

Seepage Effects on Sand-Bed Channels, Achanta Ramakrishna Rao, Vedula Subrahmanyam, S. Thayumanavan and Damodaran Namboodiripad, IR Jan/Feb. 94, p60-70.

Selection of Gravel-Transport Formula for Stream Model-ing, Howard H. Chang, HY May 94, p646-651. Shingle Movement Under Waves & Currents: An Instru-

mented Platform for Field Data Collection, George Voulgaris, Michael P. Wilkin and Michael Collins, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p894-

Some Features of the Initial Stage of Sediment Motion in Water Flows, Svetlana G. Beloshapkova, Alexander V. Water Flows, Svetlana G. Beloshapkova, Alexander V. Beloshapkov and Sergey M. Ansysferov, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p910-923.
Storm and Entrainment Effects on Tributary Sediment Loads, Deborah H. Lee, Keith W. Bedford and Chieh-Cheng J. Yen, HY Jan. 94, p81-103.
Streambed Armoring, C. O. Chin, B. W. Melville and A. J. Raudkivi, HY Aug. 94, p899-918.
Theoretically-Derived Regime River Width Pierre Y. In-

Theoretically-Derived Regime River Width, Pierre Y. Ju-

Ineoreticaliy-Derived Regime River Widni, Pierre Y. Jelien, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p949-953.
Three Dimensional Modelling of Estuarine Sediment Transport, A. Malcherek, C. LeNormant, E. Peltier, C. Teisson, M. Markofsky and W. Zielke, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p42-57.

Tide- and Stormdriven Sediment Transport on the Inner-Shelf Along the Dutch Coast, Jan W. H. van de Meene and Leo C. van Rijn, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p822-836.

The Transport of Gravels in Boulder-Bed Streams, Alan F. Barta, Peter R. Wilcock and Conor C. C. Shea, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p780-784.

Turbulence Measurements in Open-Channel Flows over Artificial Bed Forms, D. A. Lyn, HY Mar. 93, p306-326. Undertow at SUPERTANK, Jane McKee Smith, (Coastal

Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p220-232.

Use of Abandoned Pipeline to Transport Sediment to Marshes, Charles H. Coates, Jr., (Dredging '94, E. Clark

McNair, Jr., ed., 1994), p1101-1110.

Use of HEC-2 and HEC-6 to Determine Levee Heights and Revetment Toe Scour Depths, David T. Williams and David Cozakos, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1075-

Vertical Sorting Within Dune Structure, Mohamed Abdel-Motaleb, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A.

Pugh, ed., 1994), p139-148.

A Watershed Model for Estimating Suspended Sediment Hydrographs, Hafez Q. Shaheen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1176-1180.

Sediment yield

A Decision Support System for Nonpoint Source Pollution Management Using a Distributed Model-GIS-DBMS Linkage, Jaewan Yoon and G. Padmanabhan, (Comput ing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

Evaluation of Runoff and Erosion Models, Tien H. Wu, James A. Hall and James V. Bonta, IR Mar./Apr. 93,

p364-382.

Prediction of Sediment Yield, U. C. Kothyari, A. K. Tiwari and Ranvir Singh, IR Nov./Dec. 94, p1122-1131. A Study on Mathematical Model for Sediment Yield in

Mountain Regions with Large Hillside Slopes, Duo Fang and Guoliang Yu, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p752-756.

Sedimentary rock

Late Cenozoic Evolution of Fortymile Wash: Major Change in Drainage Pattern in the Yucca Mountain, Nevada Region During Late Miocene Volcanism, Scott C. Lundstrom and Richard G. Warren, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2121-2130.

The Application of Streamflow Duration Curves in Water Resources Engineering, Richard M. Vogel and Neil M. Fennessey, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p201-204.

Bridge Pier Scour with Debris Accumulation, Bruce W. Melville and D. M. Dongol, HY Sept. 92, p1306-1310. Brief Summary of National Bridge Scour Data Base, Mark

N. Landers, J. Sterling Jones and Roy E. Trent, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p41-45.

Coastal Circulation and Sedimentation During Severe Storms, Timothy R. Keen, Scott M. Glenn and Rudy I. Slingerland, (Estuarine and Coastal Modeling III, Mal-colm L. Spaulding, ed., Keith Bedford, ed., Alan Blum-berg, ed., Ralph Cheng, ed. and Craig Swanson, ed.,

berg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p.279-293.
Hocking River Sedimentation Study, Jon B. Fripp, Kenneth C. Halstead and Surya Bhamidipaty, (Hydraulic Engineering '94', George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1120-1124.
Hydraulic Engineering '94, 2 vols, ISSN: 1070-1559, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994, 0-7844-0037-7, 1375n

0-7844-0037-7, 1375pp.

Improvement of Flow in Final Settling Tanks, Ulrich Bretscher, Peter Krebs and Willi H. Hager, EE May/June 92, p307-321.

An Interagency Overview of Selected Stream Sedimenta-tion Models, Shou-shan Fan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1166-1170.

Performance of Submerged Vanes for Control of Sediment in an Irrigation Canal, Steven W. Tanis, (Hydraulic En-gineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), pl181-1185.

Practical Method for Calculating Contraction Scour, E. V. Richardson and J. R. Richardson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p6-10.

Practical Method for Scour Prediction at Bridge Piers, J. R. Richardson and E. V. Richardson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1-5.

Routing Debris Flows with Particle Segregation, Tamotsu Takahashi, Hajime Nakagawa, Tatsuo Harada and Yousuke Yamashiki, HY Nov. 92, p1490-1507.

Sediment Dispersion and Footprint Modeling Initial Characterization at a Deep Disposal Site, Albert Mills Soldate, Jr. and Kim A. Brown, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p103-110.

Sedimentation and Remediation Aspects of Recreation Lakes, Satya Vasireddy, Ashok Medhi and Anand Prakash, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1136-1140.

Small Scale Dynamic Structures and Their Sedimentation Effects in Estuarine Environment, Chaoyu Wu and Jiaxue Wu, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p158-174.

Use of a Modified Hybrid Model to Analyze the Effectiveness of Jetties in Reducing Marina Sedimentation, S. Jarrell Smith and E. J. Hayter, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p543-547.

Sedimentation tanks

Effects of Gravity Currents in Circular Secondary Clarifiers, C. van Marle and C. Kranenburg, EE July/Aug. 94, p943-960.

Improvement of Flow in Final Settling Tanks, Ulrich Bretscher, Peter Krebs and Willi H. Hager, EE May/June 92, p307-321.

Modeling of Rectangular Settling Tanks, Siping Zhou and John A. McCorquodale, HY Oct. 92, p1391-1405.

Short Circuiting and Density Interface in Primary Clarifiers, Siping Zhou, J. A. McCorquodale and A. M. Godo, HY Sept. 94, p1060-1080.

Simple Equations to Express Settling Column Data, Adem Özer, EE May/June 94, p677-682.

Simulation of Flow in Circular Clarifiers with and without Swirl, László Szalai, Peter Krebs and Wolfgang Rodi, HY Jan. 94, p4-21.

Sedimentology

The Variability of Large Alluvial Rivers, Stanley A. Schumm, ed. and Brien R. Winkley, ed., 1994, 0-7844-0054-7, 467pp.

Application of Fuzzy Logic in Civil Engineering in Japan, Hitoshi Furuta, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1900-1907.

Applying Sustainable Development, Thomas E. Mitchell, CE Dec. 94, p62-64.

Asymmetric Flow into Well by Finite Elements, Kamala K. Singh and Shambhu P. Dasgupta, IR May/June 94, p520-533.

Consolidation of Clay Layer: Hydrogeologic Boundary Conditions, Robert L. Schiffman, John M. McArthur and Robert E. Gibson, GT June 94, p1089-1093.

Effect of Permeability on Surficial Stability of Homogeneous Slopes, Daniel Pradel and Glen Raad, GT Feb. 93, p315-332.

Instability of Sandbars in Grand Canyon, Muniram Budhu and Roger Gobin, HY Aug. 94, p919-933.

Moisture and Suction in Sanitary Landfills in Semiarid Areas, G. E. Blight, J. M. Ball and J. J. Blight, EE Nov./ Dec. 92, p865-877.

Potential for Seepage Erosion of Landslide Dam, William Meyer, R. L. Schuster and M. A. Sabol, GT July 94, p1211-1229.

Reflection and Transmission of Water Wave by Porous Breakwater, L. H. Huang and H. I. Chao, WW Sept./Oct. 92, p437-452.

Seepage Effects on Sand-Bed Channels, Achanta Ramakrishna Rao, Vedula Subrahmanyam, S. Thayumanavan and Damodaran Namboodiripad, IR Jan./Feb. 94, p60-

Seepage from Canal to Asymmetric Drainages, Abate T. Wolde-Kirkos and A. S. Chawla, IR Sept./Oct. 94, p949-956.

Seepage through Dike Walls of the Chicago Confined Disposal Facility, D. D. Reible, S. A. Savant-Malhiet, L. J. Thibodeaux, K. T. Valsaraj and T. E. Myers, (*Dredging* '94, E. Clark McNair, Jr., ed., 1994), p1490-1496.

Stability of Shale Embankments, Tien H. Wu, Brian W. Randolph and Chiung-Shiann Huang, GT Jan. 93,

p127-146.

578

Transient Canal Seepage to Sloping Aquifer, Sheik M. H. Yussuff, H. S. Chauhan, Manoj Kumar and V. K. Srivastava, IR Jan./Feb. 94, p97-109

Transport Process of Surface Liquid Spills, Hsien-Ter Chou, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p145-149.

Seepage control

Practical Seepage Control in Existing Tunnels, J. Samuel Vance, Daniel J. Hurst and C. T. Goewey, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p888-895.

Soil Mix Walls in Difficult Ground, David S. Yang and Shigeru Takeshima, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p106-120.

Seismic analysis

California Water District Eyes Seismic Retrofits, CE Nov. 94, p19.

Design and Implementation of a Database for Seismic Evaluation of Structures, Steven E. Rahmann and Greg ory L. Fenves, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p790-797.

Distributed Flexibility Models for Nonlinear Analysis of RC Structures, Sashi K. Kunnath, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p145-154.

Equivalent Frame Analysis of Flat Plate Buildings for Seismic Loading, Y. H. Luo, A. J. Durrani and J. P. Conte, ST July 94, p2137-2155.

Lateral-Load Analysis of Frame Stagings for Elevated Water Tanks, Sajjad U. Sameer and Sudhir K. Jain, ST May 94, p1375-1394.

New Center Seeks Savings at Nuclear Plants, CE May 94, p22.

Nonlinear Earthquake Analysis of Concrete Gravity Dams Including Sliding, Juan W. Chávez and Gregory L. Fenves, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p173-182.

Northridge: Questioning Our Codes, Virginia Fairweather, CE June 94, p60-63.

Performance of New York's Long-span Bridges, Satinder P. S. Puri, Richard J. Kratky and Maria Grazia Bruschi, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1022-1031.

Pseudostatic Seismic Stability of Slopes: Design Charts, Dov Leshchinsky and Ka-Ching San, GT Sept. 94, p1514-1532.

RCC For Seismic Design, Noel C. Wong, Michael P. Forrest, Sr. and Sze-Hang Lo, CE Sept. 94, p60-62.

Rigid Pavement Evaluation with Seismic Pavement Analyzer, S. Nazarian, M. Baker and K. Crain, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p508-515.

Seismic Analysis of Bridges: Simplified or Refined Approach, Y. Chen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p79-84.

Seismic Analysis of Reinforced Concrete Building Using Finite-element Techniques, Tom Panayotido and Jayant Vir, (Computing in Civil Engineering, Khalil

Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1091-1098.
 Seismic Behavior of Plain- and Reinforced-Masonry Buildings, Miha Tomaževič and Polona Weiss, ST Feb. 94, p323-338.

Seismic Damage-Control Design of Gypsum-Roof Diaphragms, Sashi K. Kunnath, Mehrdad Mehrain and William E. Gates, ST Jan. 94, p120-138.

Seismic Evaluation of the Macy Street Bridge, Los Angeles, California, Using 3-D Nonlinear Pushover Methodologies, John C. Castro and Jason S. Maxwell, (Comp ing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1099-1105.

Seismic Fragility Analysis of Sheahan Pumping Building, Howard H. M. Hwang, Ah Lim Ch'ng and Hui-Mi Hsu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1006-1011.

Seismic Liquefaction Potential Assessed by Neural Net-works, Anthony T. C. Goh, GT Sept. 94, p1467-1480. Seismic Vulnerability of Flat Slab - Core Buildings

Somaprasad R. Hosahalli and Ahmet E. Aktan, ST Feb. 94, p339-359.

Under Cover, Neno Duplancic, CE Dec. 94, p70-71. Viscous Damping in Inelastic Structural Response, Dion-isio Bernal, ST Apr. 94, p1240-1254.

Seismic cone penetration tests

Towards a Rational Method of Predicting Settlements of Spread Footings on Sand, Martin Fahey, Peter K. Robertson and Ahmed A. Soliman, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p598-611.

Seismic design

Application of Concrete-Filled Steel Tubular Columns in Tall Buildings in Earthquake Area, Chahg-Ji Gong, Xi Lin and Shao-Huai Cai, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p146-151.

Behavior of Gravelly Soils During Seismic Conditions -An Overview, M. E. Hynes, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p117-120.

Caltrans Seismic Rehab in Fast Lane, CE June 94, p11.

Concrete Buildings in Regions of High Seismicity, S. K. Ghosh, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p31-36.

Cyclic Behavior of Joints Between Steel Beams and Reinforced Concrete Columns, Ryoichi Kanno and Gregory G. Deierlein, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1137-1142.

Cyclic Testing of Pultruded Fiber-Reinforced Plastic Beam-Column Rigid Connection, Michel Bruneau and David Walker, ST Sept. 94, p2637-2652.

Deflection Amplification Factor for Seismic Design Provisions, Chia-Ming Uang and Ahmed Maarouf, ST Aug. 94, p2423-2436.

Dual-Level Approach for Seismic Design of Asymmetric-Plan Buildings, Rakesh K. Goel and Anil K. Chopra, ST

Jan. 94, p161-179.

Earthquake Barrier Technology: Sliding-Friction Energy Dissipation, Marc S. Caspe, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1018-

Earthquake-Induced Settlements in Silty Sands for New England Seismicity, Cetin Soydemir, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and

Panos Dakoulas, ed., 1994), p77-90.

Effects of Site Conditions of Earthquake-Resistant Design of Structures, Vitelmo V. Bertero and Eduardo Miranda, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p561-566.

Estimation of Damping Ratio of Cable-Stayed Bridges for Seismic Design, Kazuhiko Kawashima, Shigeki Unjoh and Meguru Tunomoto, ST Apr. 93, p1015-1031.

Impediments to the Implementation of Seismic Isolation, Ronald L. Mayes, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p128-133.

Implementation of Passive Energy Dissipation Systems in the United States, Andrew S. Whittaker and Ian D. Aiken, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1280-1285.

ISDP: Integrated Approach to Seismic Design of Reinforced Concrete Structures, William C. Stone and Andrew W. Taylor, ST Dec. 94, p3548-3566.

Lateral Bracing Criteria of the Composite Braces, Kazuo Inoue, Yasuo Higashibata and Kazuhiro Inoue, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p152-157.

Lateral-Load Analysis of Frame Stagings for Elevated Water Tanks, Sajjad U. Sameer and Sudhir K. Jain, ST May 94, p1375-1394.

Lightweight Concrete for a Segmental Bridge, Juan A. Mu-rillo, Steve Thoman and Dennis Smith, CE May 94, p68-70.

Modal Predictive Control of Structures. I: Formulation, F. López-Almansa, R. Andrade, J. Rodellar and A. M. Reinhorn, EM Aug. 94, p1743-1760.

Modal Predictive Control of Structures. II: Implementation, F. López-Almansa, R. Andrade, J. Rodellar and A. M. Reinhorn, EM Aug. 94, p1761-1772.

New Methodology for Seismic Design of RC Shear Walls,

John W. Wallace, ST Mar. 94, p863-884.

Nonlinear Analysis and Experimental Validation of a Stiffening Truss Chord of the Golden Gate Bridge, R. A. Dameron, R. S. Dunham and J. C. Castro, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1106-1114.

Nonlinear Hydrodynamic Pressures on Arch Dam Faces, Bang-Fuh Chen and Ing-Sen Yuan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p411-415.

The Northridge Question: Can We Do Better?, CE May 94,

Northridge: Questioning Our Codes, Virginia Fairweather, CE June 94, p60-63.

The Nuclear Regulatory Commission's Trojan Nuclear Power Plant Seismic Design Licensing Case as an Analog to Alternative Repository Licensing Strategies, Maurice Axelrad and Michael A. Bauser, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p1573-1577.

Numerical Simulation of Site Effects, Apostolos S. Papageorgiou, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p567-572.

Overview - Electrical Substation Structures Design Guide, Leon Kempner, Jr., (Structures Congress XII, N. C Baker, ed. and Barry J. Loodno, ed., 1994), p597-600.

Performance and Analysis of Frames With "URM" Infills, Khalid M. Mosalam, Peter Gergely and Richard N. White, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p57-66.

A Performance Goal-Based Seismic Design Philosophy for Waste Repository Facilities, Quazi A. Hossain, (High Level Radioactive Waste Management, High Level Ra-dioactive Waste Program Committee, 1994), p2266-2271

Roof-Snow Load for Seismic-Design Calculations, Michael J. O'Rourke and Robert S. Speck, Jr., ST Sept. 92, p2338-2350.

Seismic Damage-Control Design of Gypsum-Roof Diaphragms, Sashi K. Kunnath, Mehrdad Mehrain and William E. Gates, ST Jan. 94, p120-138.

Seismic Design of RC Structural Walls with Unsymmetrical Cross-Sections, John W. Wallace and Sharon L. Wood, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p43-48.

Seismic Isolation Retrofit of Existing Bridges, Ronald L Mayes, Deepak Choudhury, Robert S. Crooks, David M. Jones and Richard P. Knight, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1179-1186.

Seismic Performance and Retrofit of the Golden Gate Bridge, Charles Seim, Tim Ingham, Ph.D. and Santiago Rodriguez, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p763-771.

Seismic Retrofits Should be Required (ltr), CE July 94, p28.

Seismic Upgrades Using Energy Dissipation Devices, David Bleiman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1274-1279.

SemiActive Structural Control: A Low Cost Fix for An Infrastructure at Risk, C. C. Kuo, H. Wu, L. Liu, R.L. Sack, A. Ebrahimpour and W. N. Patten, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p387-392.

Site Effects on Strong Shaking and Seismic Risk: Recent Developments and Their Impact on Seismic Design Codes and Practice, Raymond B. Seed, Stephen E. Dickenson and Chin Man Mok, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p573-578.

Talmadge Bridge Replacement, Michael Abrahams and Man-Chung Tang, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p182-187.

Tentative Provisions for the Development of Seismic Reg-ulations for Buildings, Roland L. Sharpe, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p116-121.

U.S. / Japan Large Scale Cooperative Research Program for Steel Structures, Robert D. Hanson, (Structures Con-gress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p103-108

The Use of Coda Waves for Characterizing the Site Effect on Strong Ground Motion, Keilit Aki and Byau-Heng Chin, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p579-584.

Utilizing Visco-Elastic Dampers in the Seismic Retrofit of a Thirteen Story Steel Framed Building, Patrick Crosby, James Kelly and J. P. Singh, (Structures Congress XII, Baker, ed. and Barry J. Loodno, ed., 1994), p1286-1291.

When is Finite Element Analysis Appropriate? Darrell D. Barker and James Weeks, CC Mar. 94, p1,12-15.

Seismic effects

Analysis and Computation, Franklin Y. Cheng, ed., 1994, 0-87262-974-0, 398pp.

Behavior of Gravelly Soils During Seismic Conditions -An Overview, M. E. Hynes, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p117-120.

Cyclic Behavior of Partially Saturated Collapsible Soils Subjected to Water Permeation, Kenji Ishihara and Kenji Harada, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p34-50.

Liquefaction of Silty Soils, Y. P. Vaid, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p1-16.

Methodology for Forensic Investigations of Seismic Damage, Duane Castaneda and Colin Brown, ST Dec. 94, p3506-3524.

Retrofitted Bridge Quickly Tested by Quake, CE Mar. 94, p12.

Seismic Analysis of Failure and Loss of Function of Water Pumping Facilities, M. A. Cassaro, S. E. Hamburg, D. An and M. J. Cassaro, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1208-1213.

Seismic Bearing Capacity and Settlements of Foundations, R. Richards, Jr., D. G. Elms and M. Budhu, GT Apr. 93. p662-674.

Seismic Issues in Structural Engineering Codes and Practice, Vilas Mujumdar, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1214-1219. Seismic Lateral Pressures in Soils with Cohesion, R. Richards, Jr. and X. Shi, GT July 94, p1230-1251.

Seismic Parameters from Liquefaction Evidence, James R. Martin and G. Wayne Clough, GT Aug. 94, p1345-1361.

Thermal and Seismic Impacts on the North Ramp at Yucca Mountain, M. Lin, M. P. Hardy and J. Jung, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1971-1978.

Torsional Response of Unsymmetric Buildings to Incoherent Ground Motions, G. D. Hahn and X. Liu, ST Apr.

94, p1158-1181.

A User Friendly Microcomputer Program for Liquefaction Potential Analysis, A. H. Wu, J. S. Hsu and A. Urzua, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p843-848.

Dynamic Interface Shear Strength Properties of Geomembranes and Geotextiles, M. K. Yegian and A. M. Lahlaf, GT May 92, p760-779.

Dynamic Testing of Unreinforced Brick Masonry Infills, Ghassan Al-Chaar, Richard Angel and Daniel P. Abrams, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p791-796.

The Hazard In Using Probabilistic Seismic Hazard Analysis, Ellis L. Krinitzsky, CE Nov. 93, p60-61.

Hybrid Structural Control for Seismic Safety, Michael A Riley, Haluk Aktan, Satish Nagarajaiah and Andrei M. Reinhorn, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p307-316.

Preliminary U-Series Disequilibrium and Thermolumines-cence Ages of Surficial Deposits and Paleosols Associated with Quaternary Faults, Eastern Yucca Mountain, J. B. Paces, C. M. Menges, B. Wildmann, J. R. Wesling, C. A. Bush, K. Futa, H. T. Millard, P. B. Maat and J. W. Whitney, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2391-2401.

Published Attenuation Functions Compared to 6/29/1992 Little Skull Mountain Earthquake Motion, Renner B. Hofmann and Abou-Bakr K. Ibrahim, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2402-2408.

Seismic Fragility Analysis of Sheahan Pumping Building, Howard H. M. Hwang, Ah Lim Ch'ng and Hui-Mi Hsu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1006-1011.

Seismic Hazard Analysis of Nonlinear Structures. I: Methodology, Paolo Bazzurro and C. Allin Cornell, ST Nov. 94, p3320-3344.

Seismic Hazard Analysis of Nonlinear Structures. II: Applications, Paolo Bazzurro and C. Allin Cornell, ST Nov. 94, p3345-3365.

Seismic Renewal of Civil Infrastructure Systems, M. P. Singh and S. C. Liu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1508-1513. Seismic Vulnerability of Flat Slab - Core Buildings, Somaprasad R. Hosahalli and Ahmet E. Aktan, ST Feb.

94, p339-359.

Seismic investigations

Neismic Investigations
Preliminary Results of Paleoseismic Investigations of Quaternary Faults on Eastern Yucca Mountain, Nye County, Nevada, C. M. Menges, J. R. Wesling, J. W. Whitney, F. H. Swan, J. A. Coe, A. P. Thomas and J. A. Oswald, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2373-2390.

Seismic response

3-D Dynamic Analysis of the Brent-Spence Through-Truss Bridge, I. E. Harik, D. L. Allen, R. L. Street, M. Guo, R. C. Graves, J. Harison and M. J. Gawry, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1112-1117.

Analysis and Computation of Old Truss Bridges, Beile Yin, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p32-47

Analysis of Site Liquefaction Using Earthquake Records, Mourad Zeghal and Ahmed-W. Elgamal, GT June 94, p996-1017.

An Application of a Coulomb Damped Mass Device, Apostolos Fafitis and Debra S. Larson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p399-404.

Applications of Viscoelastic Dampers to High-Rise Buildings, C. S. Tsai and H. H. Lee, ST Apr. 93, p1222-1233.

Cyclic Performance of Riveted Connections, Roberto Leon, Gabriel P. Forcier, Charles W. Roeder and F. Robert Preece, (Structures Congress XII, N. C. Baker,

ed. and Barry J. Loodno, ed., 1994), p1490-1495.

Dynamic Modeling and Response of Soil-Wall Systems,
Anestis S. Veletsos and Adel H. Younan, GT Dec. 94,

p2155-2179.

Earthquake Response of Flat-Slab Buildings, Ahmad J. Durrani, S. T. Mau, Amr Ahmed AbouHashish and Yi Li, ST Mar. 94, p947-964.

Earthquake-Induced Settlements in Silty Sands for New England Seismicity, Cetin Soydemir, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p77-90.

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Element-Level System Identification with Unknown Input, Duan Wang and Achintya Haldar, EM Jan. 94, p159-176.

Equivalent Linearization for Seismic Responses. I: Formulation and Error Analysis, Young J. Park, EM Nov. 92, p2207-2226.

Experimental Study of Thin Steel-Plate Shear Walls under Cyclic Load, Vincent Caccese, Mohamed Elgaaly and Ruobo Chen, ST Feb. 93, p573-587.

Feasibility Study of Adaptive Control of Structures Under Seismic Excitation, R. A. Burdisso, L. E. Suarez and C. R. Fuller, EM Mar. 94, p580-592. Ground Failures Under Seismic Conditions, Geotechnical

Ground Failures Under Seismic Conditions, Geotechnical Special Publication No. 44, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994, 0-7844-0055-5, 260pp.

Hi-Tech Seismic Rehabilitation of 'Casino De Montreal', Claude Pasquin, Avtar Pall and Rashmi Pall, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1292-1297.

Inelastic Link Element for EBF Seismic Analysis, James M. Ricles and Egor P. Popov, ST Feb. 94, p441-463.

Riches and Egot F. Poplov, 31 Feb. 34, p441-405.
Instantaneous Optimal Control of Building Frames, C. C. Chang and Henry T. Y. Yang, ST Apr. 94, p1307-1326.
Investigation of Performance of Bridge Abutments in Seismic Regions, Raj Siddharthan, Mahmoud El-Gamal and Emanuel A. Maragakis, ST Apr. 94, p1327-1346.

Liquefaction in Silty Soils: Design and Analysis, W. D. Liam Finn, R. H. Ledbetter and Guoxi Wu, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p51-76.

Low-Cycle Fatigue Behavior of Reinforcing Steel, J. B. Mander, F. D. Panthaki and A. Kasalanati, MT Nov. 94, p453-468.

Nonlinear Dynamic Response of an RC Structure with Advanced Cladding, Loai F. El-Gazairly, Barry J. Goodno and James I. Craig, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1262-1267.

Nonlinear Earthquake Analysis of Concrete Gravity Dams Including Sliding, Juan W. Chávez and Gregory L. Fenves, (Analysis and Computation, Franklin Y. Cheng, ed. 1990), p.173, 182

ed., 1994), p173-182.
A Peice-wise Linear Evaluation of Masonry Infills Subjected to Out-of-plane Seiesmic Drift, R. Craig Henderson, W. Dale Jones, E. G. Burdette and Max L. Porter, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p803-808.

Performance Parameters for Pseudodynamic Tests, Chris Thewalt and Mauricio Roman, ST Sept. 94, p2768-2781. Period-Dependent Effects in Seismic Torsional Response of Code Systems, Adrian M. Chandler, Joseph C. Correnza and Graham L. Hutchinson, ST Dec. 94,

p3418-3434.

Permanent Deformation on Preexisting Sliding Surfaces in Dams, George Gazetas and Nasim Uddin, GT Nov. 94, p2041-2061.

Piezometer Performance at Wildlife Liquefaction Site, California, T. Leslie Youd and Thomas L. Holzer, GT June 94, p975-995.

Prediction of Observed Bridge Response with Soil-Pile-Structure Interaction, N. Makris, D. Badoni, E. Delis and G. Gazetas, ST Oct. 94, p2992-3011.

Preserve and Protect, Loring A. Wyllie, Jr., CE Feb. 94, p48-51.

Recent Developments in Seismic Response of Composite Structures, Bahram M. Shahrooz, David A. Kramer and Mark E. Remmetter, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p158-163.

Reliability and Response Control of R/C Buildings, A. H. S. Ang and D. de Leon, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1593-1599.

Response Study of a Flexible Building Using Three Earthquake Records, M. Çelebi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1220-1225.

Seismic Analysis of Bridges: Simplified or Refined Approach, Y. Chen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p79-84

ed and Barry J. Loodno, ed., 1994), p79-84.
Seismic Behavior of Open-Web Truss-Moment Frames,
Subhash C. Goel and Ahmad M. Itani, ST June 94,
p1763-1780.

Seismic Behavior of Type PR Steel Frames, K. S. Sivakumaran and Sanjiang Chen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p585-590.

Seismic Behaviour of Tall Guyed Telecommunication Towers, Ghyslaine McClure and Eduardo I. Guevara, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p259-268.

Seismic Evaluation of the Tied-arch Bridge Across the Mississippi River on I-40, W. David Liu, Roy A. Imbsen, Richard J. LeBeau, Farrid S. Nobari and Lelio H. Mejia, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p355-360.

Seismic Performance of Railway Bridges, V. Sharma, J. Choros, E. M. Maragakis and W. G. Byers, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p367-372.

Seismic Performance of Steel-Encased Composite Columns, James M. Ricles and Shannon D. Paboojian, ST Aug. 94, p2474-2494.

Seismic Random-Vibration Analysis of Multisupport-Structural Systems, Ernesto Heredia-Zavoni and Erik H. Vanmarcke, EM May 94, p1107-1128.

Seismic Response and Retrofitting of Non-Ductile Reinforced Concrete Bridges, James Ricles, Yueh-Shiun Yang and M. J. Nigel Priestley, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1226-1231.

Seismic Response Control of Bridges by Variable Dampers, Kazuhiko Kawashima and Shigeki Unjoh, ST Sept. 94, p2583-2601.

Seismic Response of Concrete Tilt-Up Systems, Sharon L. Wood and Neil M. Hawkins, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1484-1489.

Seismic Response of Full-Scale Five-Story Reinforced-Masonry Building, F. Seible, M. J. N. Priestley, G. R. Kingsley and A. G. Kürkchübasche, ST Mar. 94, p925-946.

Seismic Response Studies on a Two Span Slab-On-Girder Bridge, J. B. Mander, S. S. Chen, D-K. Kim and D. S. MacEwan, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p361-366.

Seismic Retrofit of Existing Reinforced Concrete Columns by Glass-Fiber Composites, L. Jin, H. Saadatmanesh and M. R. Ehsani, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p753-763.

Seismic Retrofit of R/C Columns with Inadequate Lap Splices, R. S. Aboutaha, M. D. Engelhardt, J. O. Jirsa and M. E. Kreger, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1502-1507.

Seismic Shear Strength of Reinforced Concrete Columns, M. J. Nigel Priestley, Ravindra Verma and Yan Xiao, ST Aug. 94, p2310-2329.

Seismic Strengthening of URM Buildings with Steel Bracing, Durgesh C. Rai, Subhash C. Goel and William T. Holmes, Cirructures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p809-814.

Seismic Study of a Cable-Stayed Bridge, K. C. Yiak and S. Pezeshk, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1197-1207.

Seismic-Resistant Special Truss-Moment Frames, Subhash C. Goel and Ahmad M. Itani, ST June 94, p1781-1797.

A Shear-Flexure Model for Non-Ductile Reinforced Concrete Bridge Columns under Biaxial Seismic Loading, Yueh-Shiun Yang, James Ricles and M. J. Nigel Priestley, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1232-1237.

Simplified Dynamic Analysis for Gravity Dams, A. Ghobarah, Ahmad El-Nady and Tarek Aziz, ST Sept. 94, p2697-2716.

Simulated Seismic-Load Tests on Full-Scale Five-Story Masonry Building, F. Seible, G. A. Hegemier, A. Igarashi and G. R. Kingsley, ST Mar. 94, p903-924.

Simulation of Multi-Dimensional, Anisotropic Ground Motions, O. Ramadan and M. Novak, EM Aug. 94, p1773-1785. Site Effects on Strong Shaking and Seismic Risk: Recent Developments and Their Impact on Seismic Design Codes and Practice, Raymond B. Seed, Stephen E. Dick-enson and Chin Man Mok, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p573-578.

A Smoother Ride to Vibration Damping, CE May 94, p13-14

Spherical Domes Subjected to Horizontal Earthquakes, Haruo Kunieda, Shigehiro Morooka and Koji Onodera, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p229-238.

State-of-the-Art Report on Seismic Performance of Unrein-forced Masonry Buildings, Michel Bruneau, ST Jan. 94,

p230-251.

Statistical Response of a Class of Hysteretic Systems, I. I. Orabi and G. Ahmadi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p405-410.

Story-Drift, Shear, and OTM Estimation from Building Seismic Records, S. T. Mau and V. Aruna, ST Nov. 94, p3366-3385.

Structural Response to 3D Simulated Earthquake Motions in San Bernardino Valley, Erdal Şafak and Arthur Frankel, ST Oct. 94, p2820-2839. Temperature Effect of Viscoelastic Dampers during Earth-

quakes, C. S. Tsai, ST Feb. 94, p394-409.

Three-Dimensional Seismic Analysis of La Villita Dam, A.-W. Elgamal, GT Dec. 92, p1937-1958.

Variables Affecting Cyclic Behavior of Reinforcing Steel, J. I. Restrepo-Posada, L. L. Dodd, R. Park and N. Cooke, ST Nov. 94, p3178-3196.

Seismic stability

Dynamic Compaction to Remediate Liquefiable Embank-ment Foundation Soils, Karl Dise, Michael G. Stevens and J. Lawrence Von Thun, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p1-25.

Dynamic Properties of Gravel Layers Investigated by In-Situ Freezing Sampling, Takeji Kokusho and Yukihisa Tanaka, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994),

p121-140.

Gravelly Soil Properties Evaluation by Large Scale In-Situ Cyclic Shear Tests, Takaaki Konno, Munenori Hatana-ka, Kenji Ishihara, Yukimi Ibe and Setsuo Iizuka, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p177-200.

Lateral Response of Unreinforced Masonry Infill Frame Panels, James A. Hill, (Analysis and Computation,

Franklin Y. Cheng, ed., 1994), p77-83.

A Procedure for Predicting Seismic Deformation of Earth Structures, Hendra Jitno and Peter M. Byrne, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p711-725.

Pseudostatic Seismic Stability of Slopes: Design Charts, Dov Leshchinsky and Ka-Ching San, GT Sept. 94,

p1514-1532.

The Use of High Performance Fiber Reinforced Cement Composites for Seismic Rehabilitation, Neven Krstulovic-Opara, Chia-Ming Uang and Abdol Haghayeghi, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p812-819.

Seismic studies

Design and Implementation of a Database for Seismic Evaluation of Structures, Steven E. Rahmann and Gregory L. Fenves, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p790-797.

Liquefaction in Silty Soils: Design and Analysis, W. D. Liam Finn, R. H. Ledbetter and Guoxi Wu, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p51-76.

Seismic Research Program for Highway Construction, Ian G. Buckle and Ian M. Friedland, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994),

Seismic Study of a Cable-Stayed Bridge, K. C. Yiak and S. Pezeshk, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1197-1207.

Seismic Study of Historic Bridges in Eastern United States, Constantine C. Spyrakos, Emory L. Kemp and Ramesh Venkatareddy, (*Structures Congress XII*, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p380-386.

Seismic tests

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Applications of Multi-mode Imaging to Multiple Offset VSP Data, A. H. Balch, Cemal Erdemir and Joseph P. Rousseau, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2797-2803.

Seismic Evaluation of the Tied-arch Bridge Across the Mississippi River on I-40, W. David Liu, Roy Imbsen, Richard J. LeBeau, Farid S. Nobari and Lelio H. Mejia, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p355-360.

Simulated Seismic Load Tests on Reinforced Concrete Columns, S. Watson and R. Park, ST June 94, p1825-1849

Seismic waves

Dynamics of Nuclear Power Plant Structures with Foundation Interaction, Samir J. Serhan, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p55-60.

Ground-Motion and Soil-Response Analyses for Len-inakan, 1988 Armenia Earthquake, M. K. Yegian, V. G. Ghahraman and G. Gazetas, GT Feb. 94, p330-348.

Seismological, Soil and Valley Effects in Kirovakan, 1988 Armenia Earthquake, M. K. Yegian, V. G. Ghahraman and G. Gazetas, GT Feb. 94, p349-365.

The Use of Coda Waves for Characterizing the Site Effect on Strong Ground Motion, Keiiti Aki and Byau-Heng Chin, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p579-584.

Seismology

1988 Armenia Earthquake. I: Seismological, Geotechnical, and Structural Overview, M. K. Yegian, V. G. Ghahraman and G. Gazetas, GT Jan. 94, p1-20.

Seismometers

Field Test of Buried Ocean-Wave Directional Spectrometer System, Tom Nye and Tokuo Yamamoto, WW Sept./ Oct. 94, p451-467.

Selection

Computer Buying Guide for Engineering Students, J. K. Nelson, S. D. Schiff and D. A. Latimer, CC Apr. 94,

Design/Build Prequalification System, Kevin J. Potter and Victor Sanvido, ME Mar./Apr. 94, p48-56.

The Optimal Selection of Robot Modules for Space Manipulators, Robert Ambrose and Delbert Tesar, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p239-249.

Procurement Issues, Delon Hampton, ME Nov./Dec. 94, p45-49

SELECTCRANE: An Expert System for Optimum Crane Selection, Awad S. Hanna, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p958-963.

Selecting Controls for Water Distribution Systems, J. Paul Tullis, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p43-61.

Selecting Precast Concrete Building Systems, John I. Messner, Victor E. Sanvido and Masaaki Ikeda, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p368-371.

Selection of Earth Retention Systems Using Expert System, V. Sinha, M. Arockiasamy and A. Sinha, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p418-

Simulation Verifies Queuing Program for Selecting Loader-Truck Fleets, Foad Farid and Thomas L. Koning, CO June 94, p386-404.

Six Steps to Better Recruiting, Bob Burfeind, ME Nov./ Dec. 94, p14-16.

Waste Package Materials Selection Process, Ajit K. Roy, Robert L. Fish and R. D. McCright, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p993-999.

Selenite Transport in Unsaturated Tuff From Yucca Moun tain, James L. Conca and Ines R. Triay, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2175-2182.

iemi-rigid connections

3D Simulation of End-Plate Bolted Connections, Archibald N. Sherbourne and Mohammed R. Bahaari, ST Nov. 94. p3122-3136.

ATLSS Connectors in Semi-Rigid Composite Connections, Alan M. Rosa, Le-Wu Lu and B. Vincent Viscomi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1149-1154.

Behavior of Tall Frame Combining Rigid and Semi-Rigid Connections, Norimitsu Kishi, Wai-Fah Chen, Yoshiaki Goto and Ken-ichi G. Matsuoka, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1185-1190.

Classification of Semi-Rigid Connections Based on the Elastic-Plastic Mechanical Behavior of Frames, Yoshiaki Goto, Satoshi Miyashita and Wai-Fah Chen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1191-1196.

Connections for Pultruded Composites: A Review and Evaluation, Ayman S. Mosallam, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed.,

1994), p1001-1017.

Cross Bracings in Tapered Systems: Semirigid Ends, Robert Levy, Fred Segal and Avigdor Rutenberg, EM

Aug. 94, p1803-1818.

Design of Imperfect Cross-Bracings, Fred Segal, Robert Levy and Avigdor Rutenberg, EM May 94, p1057-1075. Inelastic and Stability Anlysis of Flexibly Connected Steel Frames by Springs-in-Series Model, C. Y. Yau and S. L.

Chan, ST Oct. 94, p2803-2819. Nonlinear Vibration Analysis of Steel Frames with Semi-rigid Connections, Siu Lai Chan and Goman Wai Ming

Ho, ST Apr. 94, p1075-1087.

Practical Second-Order Inelastic Analysis of Semirigid Frames, W. S. King and W. F. Chen, ST July 94, p2156-

Recent Studies of the Behaviour of Semi-Rigid Composite Connections, David A. Nethercot and Riccardo Zandonini, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1143-1148.

Stability of Columns under Uniform Axial Load with Semirigid Connections, J. Dario Aristizabal-Ochoa, ST Nov.

94, p3212-3222.

Seminars

Escaping the Niche, Shawn R. T. Severn and Corinne G. Severn, CE Oct. 94, p67-68.

Seminars: A Tool for Marketing Professional Services, Scott C. Gladden, Karen S. Nakhjiri and Shawn R. T. Severn, ME Jan./Feb. 94, p14-18.

World of Concrete Celebrates 20th Anniversary, CE Mar. 94, p22,24.

Sensitivity analysis
Analyzing Field Data for Hazen-Williams and Darcy-Weisbach Equations, Donald Clark, (Hydraulics of Pipe lines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p1-9.

Climate Change Impacts on Boston's Water Supply, Paul H. Kirshen and Neil M. Fennessey, (Water Policy and Management: Solving the Problems, Darrell G. Fontane,

Management: Solving the Problems, Dailel G. Folkale, ed. and Harry N. Tuvel, ed., 1994), p489-492.

Core Message from PNC/H-3 and Key Issues for the Next Milestone, Sumio Masuda, Katsuhiko Ishiguro, Mikazu Yui and Tadashi Mano, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1501-1507.

Evaluating Sensitivity of Hydraulic Control Optimization Models, David P. Ahlfeld and Jonathan D. Dombek, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

Evaluating the Steady State Stochastic Dynamic Program-ming Model for the High Aswan Dam, H. Abdelkader, J. Labadie and D. Fontane, (Water Policy and Manage-ment: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p826-829.

Imperfections and Thin-Walled Bars Behaviour, J. B. Obrebski and M. E. El-Awadi, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p310-319.

IPA Phase 2 and NRC's HLWM Regulatory Program, Norman A. Eisenberg, Rex G. Wescott, Margaret V. Federline, Mel Silberberg and Budhi Sagar, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1451-1460.

IPA Phase 2 Sensitivity and Uncertainty Analysis, Virginia Colten-Bradley, Richard Codell and M. Rose Byrne, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1480-1491.

Parameter Estimation in Water-Distribution Systems by Least Squares, R. S. N. Datta and K. Sridharan, WR

July/Aug. 94, p405-422.

Real-Time Flood Forecasting Using Adaptive Estimation, Dong Kug Jeong and Ben Chie Yen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p341-345.

Reliability Analysis of Stiffened Panels, E. Nikolaidis, O. Hughes, B. M. Ayyub and G. J. White, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p1466-1471.

Results from the Kristallin-I Performance Assessment, Paul A. Smith, Piet Zuidema, Ian G. McKinley, Enzo Curti, Ryk A. Klos, Trevor Sumerling and Dan Galson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1648-

Sensitivity Analysis of Bridge Equations, Jeffrey S. Glenn, (Hydraulic Engineering '94, George V. Cotroneo, ed. (Hydraulic Engineering and Ralph R. Rumer, ed., 1994), p11-15.

Sensitivity Analysis of Reliability-Based Optimal Solution,

Ib Enevoldsen, EM Jan. 94, p198-205. Sensitivity and Optimum Structural Design, Witold Gut-

kowski and Jacek Bauer, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and

Celina U. Penalba, ed., 1994), p330-339.

Sensitivity and Probabilistic Analyses of the Impact of Climatic Conditions on the Infiltration Rate in a Variable Saturated Multilayered Geologic Medium, A. Berge Saurated Multilayered Geologic Medium, A. Berge Gureghian, Aaron R. DeWispelare and Budhi Sagar, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1622-1633.

Sensitivity-Based Weighted-Average in Structural Damage Assessment, P. C. Pandey and S. V. Barai, CF Nov. 94,

Spatial Disaggregation for Studies of Climatic Hydrologic Sensitivity, Daniel Epstein and Jorge A. Ramírez, HY Dec. 94, p1449-1467

Stability Analysis of Optimal Active Control Systems with Time-Delay and Other Influence Parameters, Franklin Y. Cheng and Peter Tian, (*Analysis and Computation*, Franklin Y. Cheng, ed., 1994), p286-295.

Structural Analysis for Structural Design, D. E. Grierson, (Analysis and Computation, Franklin Y. Cheng, ed.,

1994), p133-144.

Studies of Non-Isothermal Flow in Saturated And Partially Saturated Porous Media, Clifford K. Ho, Kevin S. Maki and Robert J. Glass, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2481-2491.

A Surfzone Parameter Sensitivity Analysis on LIP11D Suspended Sediment and Return Flow Measurements, G. Mocke, A. Reniers and G. Smith, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p571-585.

Three-Dimensional Solutions for Thermomechanical Stresses in Sandwich Panels and Shells, W. Scott Burton and Ahmed K. Noor, EM Oct. 94, p2044-2071.

Acoustic-Doppler Velocimeter (ADV) for Laboratory Use, Atle Lohrmann, Ramon Cabrera and Nicholas C. Kraus, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p351-365.

- Advancement of Material Handling Technologies for In-Place Asphalt Pavement Recycling, Sotiris A. Pagdadis and Ilan Ishai, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p.
- Automated Sensor Tester, Dave Hayward, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p158-165.
- Control Model for Robotic Backhoe Excavation and Obstacle Handling, Xiaodong Huang and Leonhard E. Bernold, (Robotics for Challenging Environments, Laura A. Demsetz, ed, and Paul R. Klarer, ed., 1994). pl.23–130.
- Demsetz, ed. and Paul R. Klarer, ed., 1994), p123-130.
 Design and Testing of the NDBC Wave Processing Module, Joel N. Chaffin, William Bell, Kathleen O'Neil and Chung-Chu Teng, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p277-286.
- Experimental Study of Embedded Fiber-Optic Strain Gauges in Concrete Structures, S. F. Masri, M. S. Agbabian, A. M. Abdel-Ghaffar, M. Higazy, R. O. Claus and M. J. de Vries, EM Aug. 94, p1696-1717.
- Fiber Optic Chemical Sensors on Mars, M. A. Butler, A. J. Ricco, F. J. Grunthaner and A. L. Lane, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1345-1354.
- Fiber-Optic Bragg Grating Sensor for Nondestructive Evaluation of Composite Beams, Benxian Chen, M. H. Maher and Edward G. Nawy, ST Dec. 94, p3456-3470.
- Generalized Object Control and Assembly for Space Robots, Jeff Russakow and Stephen Rock, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p149-157.
- Generic Data Acquisition System for Robotic Waste Characterization, John T. Feddema and Barry L. Spletzer, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p320-328.
- GPS-Based Control for Space Vehicle Rendezvous, Kurt R. Zimmerman and Robert H. Cannon, Jr., (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p61-69.
- Intelligent Excavator Control for a Lunar Mining System, Paul J. A. Lever, Fei-Yue Wang and Deqian Chen, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p97-105.
- Laser Generation and Detection of Ultrasound in Concrete, Laurence J. Jacobs, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1328-1333.
- Long-Term Monitoring of Civil Structures using Smart Structures Techniques, T. Russell Gentry, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1392-1402.
- Methodology for Optimum Sensor Locations for Parameter Identification in Dynamic Systems, Firdaus E. Udwadia, EM Feb. 94, p368-390.
- A Mobile System for the Remote Assembly of Planetary Structures, P. T. Boissiere, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p278-285.
- Navigation of an Autonomous Robot Vehicle, Arturo L. Rankin, David G. Armstrong, II and Carl D. Crane, III, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p44-51.
- A New Robotic System Concept for Automating Highway Maintenance Operations, S. E. Winters, D. Hong and S. A. Velinsky, (), p374-382.
- Onika: A Multilevel Human-Machine Interface for Real-Time Sensor-Based Systems, Matthew W. Gertz and Pradeep K. Khosla, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p28-36.
- Sensing and Control for Robotic Masonry, Rami A. Rihani and Leonhard E. Bernold, Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p410-418.
- Sensors and Techniques for Structural Monitoring, R. D. Marshall, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1379-1384.

- A Sonobuoy-Sized Expendable Air-Deployable Directional Wave Sensor, Marshall D. Earle, Ralph H. Orton, Harry D. Selsor and Kenneth E. Steele, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p302-315.
- Thermal Stresses in Piezoelectric Materials: A Boundary Integral Formulation, J. S. Lee and L. Z. Jiang, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p336-347.
- Thermoelastic Theory of Cylindrical Sandwich Shells with Piezoelectric Sensors or Actuators, Victor Birman, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p80-88.
- Tide- and Stormdriven Sediment Transport on the Inner-Shelf Along the Dutch Coast, Jan W. H. van de Meene and Leo C. van Rijn. (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p822-836.
- Unsaturated Flow Experiment with Phase Change—The Heat Pipe Effect, A. Izzeldin, E. Hanson and R. Boehm, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2475-2480.
- Using a Small Satellite Bus As a Dedicated Platform for On-Orbit CSI Experiments, Andrew S. Bicos and Gregory G. Loboda, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p37-46.
- Warning System Will Report Low Visibility to Drivers, ET Dec. 94/Jan. 95, p7.
- "The Potential for the Department of Defense to Use Space-Based Remote Sensing to Support DOD and Other Government Agencies' Environmental Programs", Donald R. Artis, Jr., (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p542-552.

Separation

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- Chelating Composite Membrane: Its Application in Selective Heavy-Metal Solid-Phase Separation, Sukalyan Sengupta and Arup K. Sengupta, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p265-272.
- Eliminating Water Column Separation and Limiting Backspin at a 12,000-Horsepower Pumping Plant, Paul Otter, David Hoisington and David Raffel, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p435-445.
- Immiscible Organic Liquid Recovery Using Unconfined Membranes, Leonard Jewell and Michael J. Semmens, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p90-97.
- Numerical Comparison of Pipe-Column-Separation Models, Angus R. Simpson and Anton Bergant, HY Mar. 94, p361-377.

Separation techniques

Coordinating the Feasibility of a Dredged Material Separation System Using Hydrocyclones for the Maintenance Dredging Operation at Canaveral Harbor, Florida, Deborah R. Heibel, Mitch A. Granat and Mark Wolff, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p38-47.

Sequencing batch reactor

- Hydraulic Age Distribution in Perfectly Mixed Non-Steady-State Reactors, Marcelo Juanico and Eran Friedler, EE Nov./Dec. 94, p1427-1445.
- Real-Time Control of Aerobic-Anoxic Sludge Digestion Using ORP, David G. Wareham, Kenneth J. Hall and Donald S. Mavinic, EE Jan./Feb. 93, p120-136.

Comico He

Application of Field Data to Serviceability and Life Prediction of Highway Bridges, Jamshid Mohammadi, Sidney A. Guralnick and Ramakrishna Polepeddi, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1089-1096.

Assessment of Distress Models for Prediction of Pavement Service Life, Dar-Hao Chen, Musharraf Zaman and Joakim G. Laguros, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1073-

Dimensions and Management of Facility Performance, James C. Porter, El Jan. 94, p1-7.

Field Evaluation of Concrete Pavement Joint Sealants in Utah, Timothy D. Biel, Hosin Lee, Sherm Hopson and David Eixenberger, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p147-154

Field Tests of Railway Bridges, D. A. Foutch, D. H. Tobias and J. Choros, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1118-1123

How Do Geosynthetics Improve Pavement's Performance, Imad L. Al-Qadi, Thomas L. Brandon, Timothy E. Smith and Bruce A. Lacina, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p606-616

Planning Model for Sewer System Rehabilitation, Edward H. Burgess, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p30-38. A Probabilistic Approach to Assessing Radioactive Waste

Container Lifetimes, Fiona M. Porter, Chris C. Naish and Susan M. Sharland, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p1008-1013.

Reactor Life: Impacts on Waste Management, Ronald R. MacDonald and Billy M. Cole, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p1562-1566.

grain Commune, 1994), p. 1302-1300. SemiActive Structural Control: A Low Cost Fix for An Infrastructure at Risk, C. C. Kuo, H. Wu, L. Liu, R.L. Sack, A. Ebrahimpour and W. N. Patten, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p387-392.

Service Life Prediction, ASR Deterioration, Toy S. Poole and G. Sam Wong, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p16-26.

Test for Polymer Overlay Interface on Concrete, Brian M. Deming, Haluk Aktan and Mumtaz Usmen, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p709-715.

Finite Element Modeling of Continuous Posttensioned Voided Slab Bridges, Rajan Sen, Mohsen Issa, Xianghong Sun and Antoine Gerges, ST Feb. 94, p651-

Instrumentation and Testing of a Three Hinge Arch for Service Loads Increase, John Choros, Eduardo Ramirez and Vinaya Sharma, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1106-1111.

Old Concrete Slab Bridges. I: Experimental Investigation, A. Azizinamini, T. E. Boothby, Y. Shekar and G. Barnhill, ST Nov. 94, p3284-3304.

Old Concrete Slab Bridges. II: Analysis, A. Azizinamini, Y. Shekar, T. E. Boothby and G. Barnhill, ST Nov. 94, p3305-3319.

Serviceability

Computer Based Energy Analysis for Mechanical Retrofit of Buildings, Joseph Staib, Matt Syal and David Peters, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1349-1356.

Guidelines to Minimize Floor Vibrations from Building Occupants, Sarah E. Mouring and Bruce R. Ellingwood,

ST Feb. 94, p507-526.

Serviceability of Earth Retaining Structures, Geotechnical Special Publication No. 42, Richard J. Finno, ed., 1994, 0-7844-0051-2, 160pp.

Escaping the Niche, Shawn R. T. Severn and Corinne G. Severn, CE Oct. 94, p67-68.

Poor Service Not Poor Design Drives, ME Nov./Dec. 94, p12.

Top Design Firms Try New Strategies as Recovery Takes Hold, Survey Finds, NE Aug. 94, p15.

Settlement analysis

53 WAK Tests on Spread Footings, James C. Maxwell and Jean-Louis Briaud, (Vertical and Horizontal Deforma tions of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p143-152. Analysis of Foundation Settlement Due to Earthquake, Jian

Zhou and Jian Du, (Vertical and Horizontal Deforma tions of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p798-805.

Analysis of Stone Columns Foundation for Storage Tank by FEM, P. K. Kundu, K. G. Sharma and A. Nanda, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p701-710.

Analysis of the Juturnaiba Embankment Dam Built on a Organic Soft Clay, Roberto Q. Coutinho, Márcio S. S. Almeida and Jose Bernardino Borges, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p348-363.

Application of the Phase Change Process to One-Dimensinal Consolidation Behavior of Peat, Keiji Kogure, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p677-687.

Behavior Prediction for Spread Footings on Sand, Sujit K. Bhowmik, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p245-248.

A Case History of Settlement of an Embankment on Lagoonal Deposits Influenced by Artesian Conditions, An-Bin Huang and Bob Y. K. Wong, (Vertical and Horizontal Deformations of Foundations and Embankments, Yeung, ed. and Guy Y. Félio, ed., 1994), Albert T. p426-435.

Class A Prediction of Shallow Footing Settlements, Harry G. Poulos, (Predicted and Measured Behavior of Five

G. rouns, (relative and measured polarios) of rive Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p133-136. Computerized Building Settlement Analyses for a Contam-inated Groundwater Remediation Project, James 7, 21 McKelvey, III, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1228-1235.

Consolidation Characteristics of an Offshore Clay Deposit, J. A. R. Ortigao and A. S. F. J. Sayao, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994),

p1415-1424.

Consolidation Settlements and Pore Pressure Dissipation, Demetrious C. Koutsoftas and Raymond K. H. Cheung, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), pl 100-1110.

Correction for Settlement in Submerged Parshall Flumes, S. Abt, A. Genovez and B. Florentin, IR May/June 94,

p676-682.

Cover-Subsidence Sinkhole Evaluation of State Road 434 Longwood, Florida, Jon Foshee and Brian Bixler, GT

Nov. 94, p2026-2040.

CPT-Based Prediction of Footing Response, Paul W. Mayne, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p214-218.

Cyclic Loading for the Measuring of Soil Consolidation Parameters, Alain Vuez and Abdou Rahal, (Vertical and Horizontal Deformations of Foundations and Embank-ments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p760-774.

Deformation of Fill Slopes Caused by Wetting, Iraj Noorany, Joel A. Sweet and Ian M. Smith, (Stability and Performance of Slopes and Embankments II, Raymond B. Seed, ed. and Ross W. Boulanger, ed., 1992), p1244-1257

Deformations in Sand Layer During Pile Driving, Francis D. Leathers, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p257-268.

Design and Performance of a Piled Raft Foundation, Mark

Randolph and Patrick Clancy, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p314-324.

Does Reentrainment Occur During Cohesive Sediment Settling? Y. L. Lau and B. G. Krishnappan, HY Feb. 94,

p236-244.

Dynamic Compaction of Landfill Beneath Embankment, Paul J. Lewis and James A. Langer, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p451-461.

Effects of SPT Equipment and Procedures on the Design of Shallow Foundations on Sand, William D. Kovacs, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio,

ed., 1994), p121-131. Estimation of Settlements of Shallow Foundations, M. Surendra, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and

Robert M. Gibbens, ed., 1994), p153-156.
Estimation of Spread-Footing Settlement on a Sand Subgrade, John S. Horvath, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p145-

Failures of Residential Building Basements in Ohio, C. F. Diaz, F. C. Hadipriono and S. Pasternack, CF Feb. 94,

Footing Load Tests on Sand, Kenneth Tand, Erik Funegard and Pickett Warden, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p164-178.

Footing Modulus Near Slopes, Mark C. Gemperline, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1058-1070. Foundation Uniform Pressure and Soil-Structure Interac-

tion, Rusk Masih, GT Nov. 94, p2064-2071.

Identification and Characterization of Collapsible Gravels, Kyle M. Rollins, Ralph L. Rollins, Trevor D. Smith and George H. Beckwith, GT Mar. 94, p528-542.

The Influence of Engineering Judgement in the Settlement Analysis of a Test Fill Near Châlon-sur-Saône, France, Jean-Pierre Demartinecourt and Jean-Pierre Rajot, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p897-910.
Liquefaction-Induced Damage to Buildings in 1990 Luzon

Earthquake, Kohji Tokimatsu, Hisaya Kojima, Shinichi Kuwayama, Akio Abe and Saburoh Midorikawa, GT

Feb. 94, p290-307.

Load - Settlement Predictions for Spread Footing Event, Vincent Silvestri, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p141-144.

Load-Settlement Characteristics of Spread Footings, V. A. Divaljee, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994, p249-252.

Long Term Performance of Raft and Footing Foundations Above Clayey Silt, A. O. Landva, A. J. Valsangkar and Z. Wroblewicz, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p860-874.

Model Tests on Caissons, Sreenivas Alampalli and Venka-tanarayana Peddibotla, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p325-336.

Modeling Settlements of an Existing Municipal Solid Waste Landfill Sideslope Using an Earthen Surcharge Pile, William L. Deutsch, Jr., Owen R. Esterly and John Vitale, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and

Guy Y, Félio, ed., 1994), p1135-1148.

Numerical Study of Underpinning by Piles for Settlement
Control of Strip Foundations, M. Makarchian and H.G. Poulos, (Vertical and Horizontal Deformations of Foun-

dations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p303-313.

Guy 1. Feino, Ed., 1994), p.303-515.
Performance of a Steel Tank Founded on a Marine Clay, H. Senapathy, J. R. Davie and L. W. Young, Jr., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p830-841.

Performance of Fill that Contains Organic Matter, Robert W. Day, CF Nov. 94, p264-273.

Post-Cyclic Consolidation Behavior of Loose Sands, J. C. Chern and C. C. Lin, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p740-747.

Yeung, ed. and cuty Y. Feno, ed., 1994), 1740-747.

Fredicted Load-Settlement Behavior of Spread Footings on Sand, Casan L. Sampaco, Loren R. Anderson, Joseph A. Caliendo, Abdel Agallouch, Hogan Chang, Chia-Ching Lin, Elhassan Ethassan, Kyle Gorder, Roger Greaves, Makarand S. Jakate, Won C. Kim, Arthur L. Moss and Davins, Sibblem. (Pacificity and Mexicus) Relayation of Darrin Sjoblom, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p232-235.

Predicting Shallow Foundation Settlement in Sands from DMT, D. L. Skiles and F. C. Townsend, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed.,

1994), p132-142.

Predicting the Load-Displacement Behaviour of Spread Footings on Sand, Guido Gottardi and Paolo Simonini, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M.

Gibbens, ed., 1994), p236-239.

Predicting the Settlement of the Texas A&M Spread Foot-ings on Sand, G. Wiseman and J. G. Zeitlen, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p129-132.

Prediction of Foundation Load/Settlement Characteristics, John Scott and Keith Nicholls, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p177-

Prediction of Low Level Vibration Induced Settlement, Dong-Soo Kim, Sergey Drabkin, Anatoly Rokhvarger and Debra Laefer, (Vertical and Horizontal Deforma-tions of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p806-817.

Prediction of Settlement for Five Footings, Ameir Altaee and Bengt H. Fellenius, (Predicted and Measured Be-havior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p206-

Prediction of Settlement of Footings on Sand, G. Mesri and M. Shahien, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p188-191.

Prediction of Settlement of Spread Footings, Luciano Décourt, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and

Robert M. Gibbens, ed., 1994), p210-213.

Prediction of Shallow Foundation Settlement on Sand, Mazen E. Adib and Ramin Golesorkhi, (*Predicted and Measured Behavior of Five Spread Footings on Sand*, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p228-231.

Prediction of Vertical Load on Spread Foundations at Small and large Deflections, Richard J. Deschamps and Scott J. Ludlow, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p202-205

Predictions of Shallow Foundation Behavior for Settlement 94, Storer J. Boone, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p168-172.

Preloading Organic Soils to Limit Future Settlements, K. Peter Yu and Rudolph P. Frizzi, (Vertical and Horizon tal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p476-

Pros and Cons of Developing Recreational Facilities on Closed Landfills, Michael S. Golden, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p257-260.

The Role of Shale Pores in Settlement, Luis E. Vallejo, Michael K. Robinson and Ann C. Stewart-Murphy, (Verti-cal and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1425-1434.

Seismic Bearing Capacity and Settlements of Foundations, R. Richards, Jr., D. G. Elms and M. Budhu, GT Apr. 93, p662-674.

Seismic Settlement of Shallow Footings on Sands, Awad Al-Karni and Muniram Budhu, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p748-759.

Settlement '94, Franco Ariemma, Avtar S. Vasu, Fred Agostino and Judith S. Doyle, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p192-195.

Settlement Analysis for 450 Meter Tall KLCC Towers, Clyde N. Baker, Jr., Ir. Tarique Azam and Len S. Joseph, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1650-1671.

Settlement Analysis of Landfill Liners over Deep Mined Areas, M. Gabr, J. J. Bowders and D. T. Mooney, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p436-450.

Settlement and Deformation Response of a Bridge Footing on a Sloped Fill, Guy Y. Felio and Gunther E. Bauer, (Vertical and Horizontal Deformations of Foundations and Embakments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1071-1081.

Settlement Behavior of an Avalanche Protection Gallery Founded on Loose Sandy Silt, Walter Steiner, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p207-221.

Settlement of a 15-Meter Deep Fill Below a Building, Percy M. Wimberly, III, Samuel G. Mazzella and F. Barry Newman, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p398-416.

Settlement of a Silo Subjected to Cyclic Loading, Marco Favaretti and Alberto Mazzucato, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p775-785.

Settlement of an Air Cargo Structure on Soft Clay, Mazen E. Adib and William G. Paratore, (Vertical and Horizon-tal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p875-886.

Settlement of Compacted Fills Caused by Wetting, Iraj Noorany and Jeffrey V. Stanley, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1516-1530.

Settlement of Dynamically Compacted Deposits, Robert G. Lukas and Norman H. Seiler, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1590-1601.

Settlement of Embankments on Soft Clays, Gholamreza Mesri, Dominic O. Kwan Lo and Tao-Wei Feng, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p8-56.

Settlement of Large Mat on Deep Compressible Soil, James P. Stewart, Hugh S. Lacy and Charles C. Ladd, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), 842-859.

Settlement of Peats and Organic Soils, Tuncer B. Edil and Evert J. den Haan, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1543-1572.

Settlement of Shallow Foundations on Sand, Harvey E. Wahls and Mukesh Gupta, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Felio, ed., 1994), p190-206.

Settlement of Spread Footings on Granular Soil, Chandra S. Brahma, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p160-163. Settlement of Tanks on Clay, J. Michael Duncan, Timothy B. D'Orazio and Phil Myers, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p92-106.

Settlement of Test Fills for Chek Lap Kok Airport, Dominic O. Kwan Lo and Gholanneza Mesri, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1082-1099.

Settlement of Test Footings: Predictions from the University of New Mexico, Koon Meng Chua, Ling Xu, Eric Pease and Sameer Tamare, Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p240-244.

Settlement Prediction for Driven Piles and Pile Groups, Harry G. Poulos, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1629-1649.

Settlement Prediction of Spread Footing Based on Laboratory Test Results, Mohammed S. A. Siddiquee, Tadatsugu Tanaka and Fumio Tatsuoka, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), pl 37-140.

Settlement Predictions Footing Load Tests on Sand, Kenneth E. Tand and Pickett Warden, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p196-198.

Settlement Predictions Footing Load Tests on Sand, Erik Funegard and Pickett Warden, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p199-201.

Settlements of Highway Embankments on Soft Lacustrine Deposits, Loren R. Anderson, Casan L. Sampaco, Syed H. Gilani, Edward Keane and Loren Rausher, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p376-397.

Simple Equations to Express Settling Column Data, Adem Özer, EE May/June 94, p677-682.

Sizing Stormwater Detention Basins for Pollutant Removal, G. V. Loganathan, E. W. Watkins and D. F. Kibler, EE Nov/Dec. 94, p1380-1399.

Software for Settlement Analysis, John T. Christian, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1718-1729.

Spread Footing Prediction Event, Ching L. Kuo and Sayed M. Sayed, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p219-223.

Spread Footing Prediction Event at the National Geotechnical Experimentation Site on the Texas A&M University Riverside Campus, David Thomas, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p149-152.

Spread Footing Settlement Prediction, Carsten H. Floess, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p164-167.

Spread Footing Settlement Prediction for ASCE Specialty Conference "SETTLEMENT '94°, Jon R. Foshee, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p186-187.

Spread Footing Settlement Prediction for the National Geotechnical Experimentation Site Prediction Event: Settlement '94, P. Cooksey, Q. Tang, M. Zhao, M. Mauldon and E. Drumm, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p173-176.

Surface Settlement Due to Shear Stresses at Depth, Madhira R. Madhav and N. Kumar Pitchumani, GT July 94, p1205-1210.

- Test and Prediction Results for Five Large Spread Footings on Sand, Jean-Louis Briaud and Robert Gibbens, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p92-128.
- Test and Prediction Results for Five Spread Footings on Sand, Jean-Louis Briaud and Robert M. Gibbens, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1897-1897.
- Ultimate Settlement by Hyperbolic Plot for Clays with Vertical Drains, Siew-Ann Tan, GT May 93, p950-956.
- Use and Abuse of Settlement Analysis, Ralph B. Peck, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), pl-7.
- Vertical and Horizontal Deformations for Foundations on Sand: An Experimental Study, Christos N. Marangos, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p179-189.
- Vertical Displacement Induced in Soil by Conical Shell Foundations, Mohamed Abdel-Rahman and Adel Hanna, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p937-948.
- WAK and Full-Scale Load Tests on Granular Fill, Kevin G. Sutterer, Karl W. Myers and Glenn J. Rix, Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p153-163.
- Wanapum Dam Embankment Settlement Study, M. Gene Yow, Thomas R. Hollingsworth and David D. Moore, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p337-347.

Settlement control

- Blast Densification of a Thick, Loose Debris Flow at Mt. St. Helen's., Washington, Joseph E. Hachey, Robert L. Plum, R. John Byrne, Alan P. Kilian and David V. Jenkins, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p502-512.
- Case Study Performance of Diaphragm Walls During Construction; Predictions vs. Field Measurements, Abdol R. Haghayeghi and Mehrdad Mirzakashani, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p264-270.
- Compaction Grouting Stops Settlement of an Operating Water Treatment Plant, Percy M. Wimberly, III, F. Barry Newman, Kenneth B. Andromalos and Chris R. Ryan, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1176-1192.
- A Comparison of Three Soil Improvement Techniques to Densify Liquefaction Susceptible Sands, Alec D. Smith and Edward B. Kinner, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Felio, ed., 1994), p1224-1236.
- Compressibility of Clays: Fundamental and Practical Aspects, Serge Leroueil, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p57-76.
- Control of Settlement and Uplift of Structures Using Short Aggregate Piers, Evert C. Lawton, Nathaniel S. Fox and Richard L. Handy, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p121-132.
- The Control of Settlement Using Geogrids, Gunther E. Bauer, (Vertical and Horizontal Deformations of Foundations and Embankents, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p491-501.
- Design of Underpinning Piles to Reduce Settlements, H. G. Poulos, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Felio, ed., 1994), p1000-1010.

- Displacement of Landmark Building Resulting from Adjacent Construction Activities, Jacek K. Leznicki, Robert G. Gaibrois and Melvin I. Esrig, (Vertical and Horizontal Deformations of Foundations and Embankments, Abert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p222-232.
- Down Drag on Friction Piles: A Case History, Yalcin B. Acar, R. Richard Avent and Mohd R. Taha, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p986-p99.
- Field Test of Thermal Precompression, Tuncer B. Edil and Patrick J. Fox, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1274-1286.
 Finite Strain Consolidation for Vertical Drains, R. Robert
- Finite Strain Consolidation for Vertical Drains, R. Robert Goughnour, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p688-700.
- Influence of Flexible Mat on Settlements of Marine Clay, A. M. Deshmukh and V. T. Ganpule, (Verrical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), ps87-896
- An Investigation of the Reinforcing Effect of Stone Columns in Soft Clay, Doug Stewart and Martin Fahey, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p513-524.
- Management of Dredged Material Placement Operations, Timothy D. Stark, Iván Contreras and Jack Fowler, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994, p1333-1365.
- Measurements and Numerical Modelling of High Rise Building Foundations on Frankfurt Clay, Eberhard Franke, Bernd Lutz and Yasser El-Mossallamy, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1325–1336.
- Methods to Reduce the Settlement of Embankments on Soft Clay: A Review, Jean-Pierre Magnan, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p77-91.
- Performance of Nanhua Dam During Construction, Hsien-Chang Kao and Jin-ching Chern, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p417-425.
- Performance of Three Large-Diameter Oil Tanks on Soft Clay, Mamdouh Hamza, John R. Davie and Michael R. Lewis, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p923-936.
- Prediction of Settlements of Footings on Sands: Accuracy and Reliability, Riccardo Berardi and Renato Lancellotta, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), 9640-651.
- Probabilistic Observation Method for Settlement-Based Design of a Landfill Cover, Wilson H. Tank, Robert B. Gilbert, Mauricio Angulo and Richard S. Williams, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1573-1589.
- Reduction of Settlements Using Soil Reinforcement, M. Sherif Abdel-Baki and G. P. Raymond, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p525-537.
- Replacement of a Failed Embankment Designed to Accommodate Large Settlement: A Case Study, B. Kent Merritt and Gary M. Wantland, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p364–318.
- Residual Soil Settlment Related to the Weathering Profile, George F. Sowers, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Felio, ed., 1994), p1689-1702.

- Settlement Evaluation for Cap Closure Performance, Edward M. Zamiskie, M. Golam Kabir and Andre Haddad, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994, p462-475.
- Settlement Measurements of 50-ft High Embankments at the Chesapeake & Delaware Canal Bridge, Ed Brylawski, Poh C. Chua and Edward S. O'Malley, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1149-1163.
- Settlement of Deep Compacted Fills in California, Ernesto E. Vicente, Geraid M. Diaz and Allen M. Yourman, Jr., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1124-1134.
- Settlement of Structures Supported on Marginal or Inadequate Soils Stiffened With Short Aggregate Piers, Evert C. Lawton and Nathaniel S. Fox, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p962-974.
- Short Aggregate Piers Defeat Poor Soils, Nathaniel S. Fox, Evert C. Lawton and Richard L. Handy, CE Dec. 94, p52-55.
- Stress and Settlement of Footings in Sand, Bengt H. Fellenius and Ameir Altaee, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1760-1773.
- Towards a Rational Method of Predicting Settlements of Spread Footings on Sand, Martin Fahey, Peter K. Robertson and Ahmed A. Soliman, Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Felio, ed., 1994), p598-611.
- The Usefulness of Stone Columns to Reduce Settlements and Distortions - A Case History, Enrico Brignoli, Angelo Garassino and Pietro Renzo, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p561-570.

Settling basins

- A Better Description of Trap Efficiency for Fine Sediment in Horizontal Settling Basins, Shaohua Marko Hsu and Wei-Sheng Yu, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1186-1192.
- Cleanup of a Coal Tar Deposit Using a Vacuum Clam, B. G. Bennett, I. K. Hill and A. Z. Erzinclioglu, (*Dredging* '94, E. Clark McNair, Jr., ed., 1994), p991-1000.

Settling velocity

- Modeling Kinetics of Sediment Removal in Water Columns, P. L. Shrestha, R. S. Govindaraju and G. T. Orlob, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1065-1069.
- Modeling of Rectangular Settling Tanks, Siping Zhou and John A. McCorquodale, HY Oct. 92, p1391-1405.

.

- Improvement of Flow in Final Settling Tanks, Ulrich Bretscher, Peter Krebs and Willi H. Hager, EE May/June 92, p307-321.
- Near Field Behavior of a Far Field Circulation Model, Xueyong Zhang, Eric Adams, Alan Blumberg, Z. G. Ji and Kirk Ziegler, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p155-159.

Sewage bacteria

Tests for Biogenic Sulfuric Acid Corrosion in a Simulation Chamber Confirms the On Site Performance of Calcium Aluminate Based Concretes in Sewage Applications, Wolfgang Sand, Thierry Dumas, Serge Marcdargent, Albert Puglisea and Jean-Louis Cabiron, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p35-55.

Sewage disposal

- Beneficial Use of Ash: An Innovative Approach to Sludge Management, Michael E. Manning, John R. Amend and Mark K. Ballerstein, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p146–153.
- Field Tests on Small Marine Outfall, James J. Sharp, EE Mar./Apr. 94, p471-477.
- A Predictive Model of Sewage Pumpout Station Use Among Chesapeake Bay Boaters, Stuart Cottrell and Alan Graefe, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p59-68.
- Risk Analysis: Wet Weather Flows in S.E. Michigan, Jonathan W. Bulkley, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p89-101.

Sewage sludge

- Beneficial Use of Ash: An Innovative Approach to Sludge Management, Michael E. Manning, John R. Amend and Mark K. Ballerstein, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p146-153.
- Bioleaching of Metals from Sewage Sludge: Elemental Sulfur Recovery, B. R. Ravishankar, J. F. Blais, H. Benmoussa and R. D. Tyagi, EE Mar./Apr. 94, p462-470.
- Clearing the Air About Sludge Incinerator Emissions, Philip M. Martin, Eugene W. Waltz and Richard D. Kuchenrither, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p122-128.

Sewage treatment

- Hydraulic Age Distribution in Perfectly Mixed Non-Steady-State Reactors, Marcelo Juanico and Eran Friedler, EE Nov/Dec. 94, p1427-1445.
- Roiled Waters: Water Politics in the 1990s, Teresa Austin, CE July 94, p49-51.

Sewage treatment plants

Roiled Waters: Water Politics in the 1990s, Teresa Austin, CE July 94, p49-51.

Sewer design

- Design of Sewers Based on Minimum Velocity, Ismail I. Esen, EE May/June 93, p591-594.
- Microtunneling Arrives in San Diego as an Attractive Alternative to Open Trenching, William J. Swallow, III, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p896-903.
- Need for New Standards to Prevent Deposition in Wastewater Sewers, Chandra Nalluri and Wojciech Dabrowski, EE Sept./Oct. 94, p1032-1043.

Sewer maintenance

- Existing Sewer Evaluation and Rehabilitation, Second Edition, Second edition (M&R No. 62), Joint Task Force of the Water Environment Federation and the American Society of Civil Engineers, (B. Jay Schrock, chmn.), 1994, 0-7844-0049-0, 27090.
- Improvement and Re-establishment of Good Hydraulic Conditions in Sewers: The French Experience, Y. Diab and M. Mommessin, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p329-338.
- Planning Model for Sewer System Rehabilitation, Edward H. Burgess, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p30-38.
- Robotic Rehabilitation of Sewer Infrastructure, R. Laurence Day, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p383-391.

Sewer pipes

Evaluation of Shotcrete Efficiency in Sewers Rehabilitation, Youssef Georges Diab, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p928-935.

Failure of Large Diameter High Density Polyethylene Failure of Large Diameter High Density Polyethylene Sewer Pipe a Case in Point, Ley K. Jeyapalan and Joe A. Conner, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p356-371.

Flow Capacity of Rehabilitated Sanitary Sewers, Kenneth K. Kienow, Karl E. Kienow and Paul E. Kienow, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas desiries of Pipelines.

draulics of Pipelines, Deon T. Fowles, ed. and Douglas

H. Wegener, ed., 1994), p.28-42.
Microtunneling Arrives in San Diego as an Attractive Atternative to Open Trenching, William J. Swallow, III, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p896-903.

Service Lateral Reconstruction in the Isle of Man, Jeff Wells, (Infrastructure: New Materials and Methods of

Repair, Kim D. Basham, ed., 1994, p257-264.
Upgrading Dubai's Sewers, Henry R. Derr and Bruce W. Jones, CE Aug. 94, p60-63.

Argentina outlook, WP Spring 94, p4.

Construction Technologies for Sewer Rehabilitation, Santiago M. Reyna, Jorge A. Vanegas and Abdul H. Khan, CO Sept. 94, p467-487.

Costs and Benefits of Meeting the San Francisco Bay Copper Objective by Regulating Small Treatment Plants, Steven X. McHaney, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1232-1236.

The Danby Pipe Renovation System, George McAlpine, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p144-158.

Design of Sewers Based on Minimum Velocity, Ismail I.

Esen, EE May/June 93, p591-594.

EPA Orders National Strategy on Sewer Overflows to Ease Water Pollution, NE Aug. 94, p15.

Existing Sewer Evaluation and Rehabilitation, Second Edition, Second edition (M&R No. 62), Joint Task Force of the Water Environment Federation and the American Society of Civil Engineers, (B. Jay Schrock, chmn.), 1994, 0-7844-0049-0, 270pp.

The Implementation of a Comprehensive Water and Wastewater Utility Development Fee Process to Allocate the Cost of New Development to the Beneficiaries, Kenneth M. Needham and Joyce Kinnear, (Revenue Enhancement for Water and Wastewater Systems, Jerry R. Rogers, ed. and William P. Bullock, Jr., ed., 1994), p24-30.

Improvement and Re-establishment of Good Hydraulic Conditions in Sewers: The French Experience, Y. Diab and M. Mommessin, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p329-338

Local Sewer Rehabilitation - Metro Chicago, William A. Macaitis and Robert Kuhl, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p111-122.

Microtunneling Goes West, CE Aug. 94, p16-17.
Multi-Attribute Rehabilitation of Storm or Combined
Sewer Systems, Santiago M. Reyna, Jacques W. Delleur and Jorge A. Vanegas, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p55-72.

Need for New Standards to Prevent Deposition in Waste-water Sewers, Chandra Nalluri and Wojciech Da-

browski, EE Sept./Oct. 94, p1032-1043.

Overflow Elimination Benefits from GIS Based Technology, Rod Thornhill, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p829-835.

Pipe Utility Evaluations With the Aid of GIS, Raymond A. Pittman, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p242-246

Planning Model for Sewer System Rehabilitation, Edward H. Burgess, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation

and lask Committee on Uroan Drainage Renabilitation Programs and Techniques, ASCE, 1994), p30-38. Sediment Transport in Sewers and Design Implications, Chandramouli Nalluri and Aminuddin Ab Ghani, (Hy-draulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p933-938.

Sewerage Failure, Diagnosis and Rehabilitation, J. W. Delleur, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and tale Patient Pagiostics and Reinedain Vielastica Niedastica Maria Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), pl 1-28. Sewerage Rehabilitation Verified Simulation Modeling, Phil Wildbore, (Urban Drainage Rehabilitation Programs of Programs

grams and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p73-83.

Solving Collections Problems to Increase Revenue: The Houston Experience, 1988-1993, Karen Philippi, (Revenue Enhancement for Water and Wastewater Systems, Jerry R. Rogers, ed. and William P. Bullock, Jr., ed.,

1994), p8-14.

590

To Microtunnel or Not to Microtunnel? The Construction of the Crown Point Trunk Sewer, Karen Larson Henry and Dave Zoumaras, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p73-

Trenchless Sewer System Reconstruction Techniques, Lynn E. Osborn, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p159-172.

Understanding the Modes of Failure for Sewers, Robert F. Serpente, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p86-100.

Upgrading Dubai's Sewers, Henry R. Derr and Bruce W.

Upparating Droins 3 Sewests, Heinly R. 2016.
Jones, CE Aug. 94, p60-63.
Urban Drainage Rehabilitation Programs and Techniques,
Edited by William A. Macaitis, Task Committee on
Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994, 0-7844-0038-5, 223pp.

The Use of Iron Salts to Control Dissolved Sulfide in Districts' Trunk Sewers, Navnit A. Padival, William A. Kimbeli and John A. Redner, (Critical Issues in Water

Kimbell and John A. Redner, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p743-750. Utilizing Coordinated Billing and Metering Systems Anal-ysis to Enhance Utility Revenue on a Shared Revenue Basis, Randy P. Schuler, (Revenue Enhancement for Water and Wastewater Systems, Jerry R. Rogers, ed. and William P. Bullock, Jr., ed., 1994), p15-23.

Shaffer, L. R.

Shaffer, Head of Army Research Lab, Dies, CE Sept. 94, p79.

Shaft resistance, piles

Mechanisms of Shaft Friction in Sand from Instrumented Pile Tests, B. M. Lehane, R. J. Jardine, A. J. Bond and R. Frank, GT Jan. 93, p19-35.

Central Artery Vent Shaft Will Come Wrapped, CE May 94, p25,27.

Self-Hardening Slurry Supports Shaft, CE Mar. 94, p92.

Shafts, excavations

Numerical Modeling of Initial Ground Movement in an In-strumented Superconducting Super Collider Shaft, David B. Spires, Fei Duan and Marek Mrugala, (Com-puting in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1990-1996.

Shaft Performance in Taylor Marl-Field Measurements vs. Numerical Modeling, David B. Spires, Fei Duan and Marek Mrugala, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p779-784.

Shake table tests

Dynamic Interface Shear Strength Properties of Geomembranes and Geotextiles, M. K. Yegian and A. M. Lahlaf, GT May 92, p760-779.

Dynamic Lateral Pressures Due to Saturated Backfills on Rigid Walls, Isao Ishibashi, Makoto Osada and Tatsuo

Uwabe, GT Oct. 94, p1747-1767.
Seismic Response Control of Bridges by Variable Dampers, Kazuhiko Kawashima and Shigeki Unjoh, ST Sept. 94, p2583-2601.

Shale

Effects of Particle Shape on Bedload Transport, M. Moore and P. Diplas, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p800-

The Role of Shale Pores in Settlement, Luis E. Vallejo, Michael K. Robinson and Ann C. Stewart-Murphy, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio,

ed., 1994), p1425-1434.

Stability of Shale Embankments, Tien H. Wu, Brian W. Randolph and Chiung-Shiann Huang, GT Jan. 93,

Swelling Behavior of Shales in Cold Regions, Z. W. Wang, S. L. Huang and R. C. Speck, CR Mar. 94, p21-34.

Shallow foundations

Bearing Capacity of Shallow Foundations on Noncohesive Soils, Bohdan Zadroga, GT Nov. 94, p1991-2008. Bearing Capacity of Soils, U.S. Army Corps of Engineers,

Department of the Army, 1993, 0-87262-997-X, 145pp.

The Behavior of a Building with Shallow Foundations on a Stiff Lateritic Clay, Luciano Décourt, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1505-1515.

Effects of SPT Equipment and Procedures on the Design of Shallow Foundations on Sand, William D. Kovacs, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p121-131.

Estimation of Settlements of Shallow Foundations, M. Surendra, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p153-156.

Experimental Study of the Settlement of Shallow Foundations, Samuel Amar, François Baguelin, Yves Canépa and Roger Frank, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed.

and Guy Y. Félio, ed., 1994), p1602-1610.
Footing Modulus Near Slopes, Mark C. Gemperline, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio,

ed., 1994), p1058-1070.

Large-Scale Loading Tests of Shallow Footings in Pneumatic Caisson, Osamu Kusakabe, Yoshito Maeda and Masatoshi Ohuchi, GT Nov. 92, p1681-1695.

Load Settlement curve Method for Spread Footings of Sand, Jean-Louis Briaud and Philippe Jeanjean, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1774-1804.

Movement of Foundations on Rock, Ian W. Johnston, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio,

ed., 1994), p1703-1717.

Predicting Shallow Foundation Settlement in Sands from DMT, D. L. Skiles and F. C. Townsend, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p132-142.

Predicting the Load-Displacement Behaviour of Spread Footings on Sand, Guido Gottardi and Paolo Simonini, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p236-239.

Prediction of Shallow Foundation Settlement on Sand, Mazen E. Adib and Ramin Golesorkhi, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p228-231.

Predictions of Shallow Foundation Behavior for Settlement '94, Storer J. Boone, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p168-172.

Preloading Organic Soils to Limit Future Settlements, K. Peter Yu and Rudolph P. Frizzi, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p476-490

Seismic Bearing Capacity and Settlements of Foundations, R. Richards, Jr., D. G. Elms and M. Budhu, GT Apr. 93,

p662-674.

591

Settlement of an Air Cargo Structure on Soft Clay, Mazen E. Adib and William G. Paratore, (Vertical and Horizon tal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p875-

Settlement of Building Foundations on Clay Soil Caused by Evapotranspiration, Vincent Silvestri and Claudette Tabib, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1494-1504.

Settlement of Footings on Granular Materials: Low and Large Strain Parameters, F. Ahtchi-Ali and J. C. San-tamarina, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1287-1297.

Settlement of Shallow Foundations on Sand, Harvey E. Wahls and Mukesh Gupta, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p190-206.

Settlement of Structures Supported on Marginal or Inad-equate Soils Stiffened With Short Aggregate Piers, Evert Lawton and Nathaniel S. Fox, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p962-

Short Aggregate Piers Defeat Poor Soils, Nathaniel S. Fox, Evert C. Lawton and Richard L. Handy, CE Dec. 94, p52-55.

Vertical and Horizontal Deformations for Foundations on Sand: An Experimental Study, Christos N. Marangos, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p179-189.

A 2D numerical simulation of the Po river delta flow, D. Ambrosi, S. Corti, V. Pennati and F. Saleri, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p18-29.

Anomalous Dispersion Paradox in Shallow Water Gravity nomaious Dispersion Faradox in Shaduow water Gravity
Waves Shoaling Over Slopping Bottom, S. Yu. Kuznetsov and N. S. Speransky, (Ocean Wave Measurement
and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p364-373.

A comparison between computed and measured bed evolution in a river bend, L. Montefusco and A. Valiani, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994),

Comparison of 2D and 3D Models for Computing Shallow Water Tides in a Friction-Dominated Tidal Embayment, R. R. Grenier, R. A. Luettich, Jr. and J. J. Westerink, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph

nig, co., Keitti Bediotid, cu., Atan Bittinoerg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p58-70. Considerations in 2-D Modeling of Hydraulically Steep Flow, R. C. Berger and R. L. Stockstill, (Hydraulic En-gineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1285-1289.

Diffusion Hydrodynamic Model of Shallow Estuary, G. L. Guymon, M. N. Khan, M. Collins and T. V. Hromadka, WR Mar./Apr. 94, p253-266.

Dispersive-Flow Energy Dissipator, Shou Long Yang, HY Dec. 94, p1401-1408.

Finite-Volume Two-Dimensional Unsteady-FLow Model for River Basins, D. H. Zhao, H. W. Shen, G. Q. Tabios, III, J. S. Lai and W. Y. Tan, HY July 94, p863-883.

III, J. S. Lai and W. T. Lai, Th. July 24, pool-oos-Flood Propagation on Mobile Beds under Mountainous Flow Conditions, C. Beffa and R. Faeh, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Mol-inaro, ed. and Luigi Natale, ed., 1994), p327-341.

Free surface flow modelling on a complex topography, Mohamed Naaim and Gerard Brugnot, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p298-308.

Modeling Horizontal Round Buoyant Jets in Shallow Water, A. J. Johnston, C. R. Phillips and R. E. Volker, HY Jan. 94, p41-59.

New Methods for Modelling Dam-Break Wave, A. Pa-quier, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p229-240.

A New Set of Equations for Very Shallow Water and Par-tially Dry Areas Suitable to 2D Numerical Models, A. Defina, L. D'Alpaos and B. Matticchio, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p72-81.

On the Generation of Infragravity Waves by Shoaling Multidirectional Waves, Okey Nwogu, (Ocean Wave Meas-urement and Analysis, Orville T. Magoon, ed. and J. Mi-

chael Hemsley, ed., 1994), pl-14. Second Order Directional Wave Kinematics in Shallow Water, Jagat N. Sharma and R. G. Dean, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p165-179.

Spectral and Parametric Wave Models of Lake Erie, David J. Welsh and Keith W. Bedford, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p217-221.

Spectral Boussinesq Modelling of Breaking Waves, J. A. Battjes, Y. Eldeberky and Y. Won, (Ocean Wave Meas-urement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p813-820.

Strengths and Weaknesses of Shallow Water Equations in Steep Open Channel Flow, R. C. Berger, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1257-1262.

Depositional Turbidity Currents Laden with Poorly Sorted Sediment, Marcelo H. Garcia, HY Nov. 94, p1240-1263.

Effect of Material Properties on Compactability and Bear-ing Capacity, Chris J. Semmelink and Alex T. Visser, TE July/Aug. 94, p570-589.

Effects of Particle Shape on Bedload Transport, M. Moore and P. Diplas, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p800-

Equivalent Diameter of Vertical Drains With an Oblong Cross Section, Richard P. Long and Alvaro Covo, GT Sept. 94, p1625-1630.

Influence of Wave Groups on Stability of Berm Breakwaters, Kevin R. Hall, WW Nov./Dec. 94, p630-636.

Vibration of Mindlin Plates on Point Supports Using Constraint Functions, K. M. Liew, Y. Xiang, S. Kitipornchai and M. K. Lim, EM Mar. 94, p499-513.

Sharpe, Roland L.

ASCE Elevates 13 of Its Own to Honorary Membership, NE May 94, p3.

Atlanta Ceremony Celebrates 13 New Honorary Members of ASCE, NE Dec. 94, p2-3.

Application of Fracture Mechanics to Soils: An Overview. Luis E. Vallejo, (Fracture Mechanics Applied to Geo-technical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p1-20.

Averaging Time and Maximum Speeds in Hurricanes, Naveen Aerrabotu and Timothy A. Reinhold, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p467-472.

Behavior of RC Beams under Sustained Load, Nie Jianguo and Shen Jumin, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p239-244. Buckling Solutions of Rectangular Mindlin Plates under Uniform Shear, C. M. Wang, Y. Xiang and S. Ki-tipornchai, EM Nov. 94, p2462-2470.

Composite Walls as Shear Elements in Tall Structures, Howard Wright, Anwar Hossain and Stewart Gallocher, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p140-145.

Evaluation of Code Accidental-Torsion Provisions from Building Records, Juan Carlos De la Llera and Anil K.

Chopra, ST Feb. 94, p597-616.

592

Fracture Mechanics and Plasticity in Saturated Clay, Adel S. Saada, Liqun Liang and Gary F. Bianchini, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p21-39.

Local Web Crippling of Unstiffened Multi-Cell Box Sections, Mark R. Kaczinski, Christopher R. Schneider, Robert J. Dexter and Le-Wu Lu, (Structures Congress XII., N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p343-348.

The Mechanics of Cracking in Embankment Dams, James R. Talbot, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang,

ed., 1994), p118-131.

Metal Truss Plates: Less than Full-Depth Penetration and Shear Buckling, Keith F. Faherty, Gerri L. Peot nee Kocher and Matthew J. Mazza, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p695-700.

Rotational Centers of Plates Regulating Distortion of Box Girders, Tsuneo Usuki, ST Sept. 94, p2602-2622.

Shear Connection in Haunched Composite Beams with Sloping Sides, Deric John Oehlers and Sung Moo Park, ST July 94, p2227-2232.

Shear Design Guidelines for Polyester Concrete Using Recycled Plastic, K. S. Rebeiz, S. P. Serhal and D. W. Fowler, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p821-826.

Story-Drift, Shear, and OTM Estimation from Building Seismic Records, S. T. Mau and V. Aruna, ST Nov. 94, p3366-3385.

The Sundance Fault: A Newly Recognized Shear Zone at Yucca Mountain, Nevada, R. W. Spengler, C. A. Braun, L. G. Martin and C. W. Weisenberg, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p2359-2366.

Tests of Full-Size Pretensioned AASHTO Beams with Debonded Strands, O. Abdalla, J. A. Ramirez and R. H. Lee, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1409-1414.

Thresholds for Gravel and Cobble Motion, Katherine J. Chase, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p790-

Shear deformation

Composite Beam Element with Layerwise Plane Sections, Youngchan Kim, Julio F. Davalos and Ever J. Barbero, EM May 94, p1160-1166.

Continuum Model for Analysis of Multiply Connected Per-forated Cores, Domenico Capuani, Marco Savoia and Ferdinando Laudiero, EM Aug. 94, p1641-1660.

Early Detection of Rock Movement with Time Domain Reflectometry, Charles H. Dowding and Fei-Chiu Huang, GT Aug. 94, p1413-1427.

Improved Wide-Column-Frame Analogy for Shear/Core Wall Analysis, A. K. H. Kwan, ST Feb. 93, p420-437.

Nonlinear Analysis of Angle-Ply Composite and Sandwich Laminates, T. Kant and J. R. Kommineni, AS July 94, p342-352.

Postbuckling Response of Doubly-Curved Shallow Panels Under Complex Loading Conditions, L. Librescu and M. Y. Chang, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p116-126.

Stability of Skew Mindlin Plates under Isotropic In-Plane Pressure, C. M. Wang, S. Kitipornchai, Y. Xiang and K. M. Liew, EM Feb. 93, p393-401.

Shear effects

Mixing by Shear Instabilities of the Longshore Current, J. C. Church, E. B. Thornton and J. Oltman-Shay, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p376-390.

Shear Effects on the Free Vibrations of Coupled Shear Walls, G. Q. Li and B. S. Choo, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1727-1734.

Shear Effects on the Static Behaviour of Stiffened Pierced Walls, B. S. Choo and G. Q. Li, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1719-1726.

Design of Prestressed Hollow Core Slabs with Reference to Web Shear Failure, Lin Yang, ST Sept. 94, p2675-2696.

Punching Shear of Reinforced Concrete Shell Structures, Gajanan M. Sabnis and Amjad A. Shadid, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p907-

Shear Failure of Concrete Beams Reinforced with Plates, M. Arduini, A. D'Ambrisi and A. Di Tommaso, (Infra-structure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p123-130.

Computation of Turbulent Shear Flow Over Surface-Mounted Obstacle, Jianming He and Charles C. S. Song, EM Nov. 92, p2282-2297.

Momentum and Energy Coefficients Based on Power-Law Velocity Profile, Cheng-lung Chen, HY Nov. 92, p1571-1584.

Sediment Suspension Events and Shear Instabilities in the Bottom Boundary Layer, D. L. Foster, R. A. Holman and R. A. Beach, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p712-726.

Torsion of Regular Multicellular Members, Donald L. Dean, ST Dec. 94, p3675-3678.

Shear forces

Behavior of Hydraulic Jump Basins, Boualem Hadjerioua, Emmett M. Laursen and Margaret S. Petersen, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p416-420.

Distribution of Shear Force on Boundary of Smooth Rec-tangular Duct, David G. Rhodes and Donald W. Knight,

HY July 94, p787-807.

Monitoring and Modeling the Transport of Coarse Single Particles in Mountain Rivers, Peter Ergenzinger and Carmen de Jong, (Hydraulic Engineering '94, George V.

Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p634.
Nonlinear Finite Element Analysis of Concrete Deep Beams, A. Fafitis and Y. H. Won, ST Apr. 94, p1202-1220

Negative Shear Lag in Framed-Tube Buildings, Y. Singh and A. K. Nagpal, ST Nov. 94, p3105-3121.

Prestress Influence on Shear-Lag Effect in Continuous Box-Girder Bridge, Shih Toh Chang, ST Nov. 92, p3113-3121.

Simple Method for Approximate Analysis of Framed Tube Structures, A. K. H. Kwan, ST Apr. 94, p1221-1239.

Shear modulus

Determining Bituminous Pavement Shear Modulus, John E. Haddock and Thomas D. White, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p788-795.

Extraction of Dynamic Soil Properties Using Extended Kalman Filter, Jeen-Shang Lin, GT Dec. 94, p2100-

Preconsolidation versus Aging Behavior of Kaolinite Clay, G. A. Athanasopoulos, GT June 93, p1060-1066.

Prediction of Settlement of Spread Footings, Luciano Décourt, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p210-213.

Shear Modulus of Kaolin Containing Methane Bubbles, S. M. Duffy, S. J. Wheeler and J. D. Bennell, GT May 94,

p781-796.

Warping Stresses in Concrete Pavements on Pasternak Foundation, X. P. Shi, T. F. Fwa and S. A. Tan, TE Nov./Dec. 93, p905-913.

Shear resistance

Design of Lateral Steel in Columns, Shamim A. Sheikh and Murat Saatcioglu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p432-437.

Seismic Strengthening of URM Buildings with Steel Brac-ing, Durgesh C. Rai, Subhash C. Goel and William T. Holmes, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p809-814.

Stress-Path Dependent Shear Strength of Sand, J. Feda, GT June 94, p958-974.

Where are the Shear Resistors? (ltr), CE June 94, p38.

Cyclic Threshold Shear Strains in Soils, Mladen Vucetic, GT Dec. 94, p2208-2228.

Shear strength

Crack Depths in Drying Clays Using Fracture Mechanics, Peter H. Morris, James Graham and David J. Williams, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p40-53.

Effect of Permeability on Surficial Stability of Homogene ous Slopes, Daniel Pradel and Glen Raad, GT Feb. 93,

p315-332.

Influence of Membrane Forces on Transverse-Shear Reinforcement Design, Perry Adebar and Weishi He, ST Apr. 94, p1347-1366.

Interface Shear-Strength Properties of Roughened HDPE, Marc E. Orman, GT Apr. 94, p758-761.

Landfill Liner Interface Strengths from Torsional-Ring-Shear Tests, Timothy D. Stark and Alan R. Poeppel, GT Mar. 94, p597-615.

Punching Shear Strength of Steel Fiber Reinforced Con-crete Slabs, Kiang-Hwee Tan and P. Paramasivam, MT May 94, p240-253

Reinforcing Sand With Strips of Reclaimed High-Density Polyethylene, Craig H. Benson and Milind V. Khire, GT May 94, p838-855.

Seismic Shear Strength of Reinforced Concrete Columns, M. J. Nigel Priestley, Ravindra Verma and Yan Xiao, ST Aug. 94, p2310-2329.

Settlement Predictions at a Florida Port Facility, Thomas E. Selfridge and Kirk A. McIntosh, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p571-

Stability of Shale Embankments, Tien H. Wu, Brian W. Randolph and Chiung-Shiann Huang, GT Jan. 93, p127-146.

Strength Variability of Wood Formwork Members, Saeed Karshenas, (Structures Congress XII, N. C. Baker, ed.

and Barry J. Loodno, ed., 1994), p526-531.

T-Bar Penetration Testing in Soft Clay, D. P. Stewart and M. F. Randolph, GT Dec. 94, p2230-2235.

Accurate Estimation of Interface Shear Stresses in Composite Masonry Walls, Subhash C. Anand and M. Ayu-bur Rahman, ST Mar. 94, p998-1015.

Behavior of Reinforced High-Strength-Concrete Corbels, Yook-Kong Yong and P. Balaguru, ST Apr. 94, p1182-

1201

Bond Development of Thermoplastic FRP Shear Reinforcement Stirrups, Justin Currier, Christian Fogstad, David Walrath and Charles Dolan, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p592-597

Boundary Shear in the Vicinity of River Banks, Donald W. Knight and Shuyou Cao, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p954-958.

Carpet Flow Analysis, Yonas Kinfu and Michael C. Quick, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1161-1165.

Coarse Sediment Transport and the Maintenance of Fish Habitat in the Upper Colorado River, John Pitlick, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p855-859. Combined Oscillatory and Steady Flow Over Ripples, K. I. Mahesha Ranasoma and John F. A. Sleath, WW July/

Aug. 94, p331-346.

Effects of Particle Shape on Bedload Transport, M. Moore and P. Diplas, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p800-

Energy Losses in Steep Tributary Streams at Flows Near The Threshold of Bedload Entrainment, Matthew D. O'Connor, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p778-

Estimating Local Bed Shear Stress in Large Gravel-Bed Rivers, Peter R. Wilcock, Alan F. Barta and Conor C. C. Shea, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p834–838. Field Evaluation of the Sediment Transport Model "Stream" with a Bank Erosion Component, Deva K.

Borah and Mona S. Dashputre, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p979-983.

Fluvial Hydraulics of Streams and Mountain Rivers with Mobile Bed, Wojciech Bartnik and Alicja Michalik, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p767-771.

Interface Shear Stress in Overlaid Concrete Pavements, C. M. Lau, T. F. Fwa and P. Paramasivam, TE Mar/Apr. 94, p163-177.

Lacey Divergence Equations for Alluvial-Canal Design, S. V. Chitale, HY Nov. 94, p1320-1326.

Measurement and Prediction of Surface Shear Stress in Annular Flume, D. I. Graham, P. W. James, T. E. R. Jones, J. M. Davies and E. A. Delo, HY Sept. 92, p1270-1286.

Motion of Contact-Load Particles at High Shear Stress, Fidelia N. Nnadi and Kenneth C. Wilson, HY Dec. 92,

p1670-1684

Response of Velocity and Turbulence to Abrupt Changes from Smooth to Rough Beds in Open-channel Flows, Iehisa Nezu and Akihiro Tominaga, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p195-204

Seepage Effects on Sand-Bed Channels, Achanta Ramakr-ishna Rao, Vedula Subrahmanyam, S. Thayumanavan and Damodaran Namboodiripad, IR Jan./Feb. 94, p60-

Shear-Stress Distribution in Symmetrically Tapered Cantilever Beam, Edwin P. Russo and Gregory Garic, ST Nov. 92, p3243-3249.

Size Effect in Fiber or Bar Pullout with Interface Softening Slip, Zdeněk P. Bažant and Rodrigue Desmorat, EM Sept. 94, p1945-1962.

Spalling of Continuously Reinforced Concrete Pavements, Dan G. Zollinger, Sanjaya P. Senadheera and Tianxi Tang, TE May/June 94, p394-411.

Streambed Armoring, C. O. Chin, B. W. Melville and A. J. Raudkivi, HY Aug. 94, p899-918.

Surface Settlement Due to Shear Stresses at Depth, Madhira R. Madhav and N. Kumar Pitchumani, GT July 94, p1205-1210.

A User Friendly Microcomputer Program for Liquefaction Potential Analysis, A. H. Wu, J. S. Hsu and A. Urzua, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p843-848. Velocity Measurements by the "One-Orange Method", B. A. Christensen, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p76-85.

Velocity Measurements in Asymmetric Turbulent Channel Flows, R. N. Parthasarathy and M. Muste, HY Sept. 94,

Verification of the Shearstress Boundary Conditions in the Undertow Problem, Marcel J. F. Stive and Huib J. De Vriend, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p533-542.

Anisotropy Studies on Cuboidal Shear Device, N. Sivakugan, J-L. Chameau and R. D. Holtz, GT June 93, Drained Residual Strength of Cohesive Soils, Timothy D. Stark and Hisham T. Eid, GT May 94, p856-871.

Gravelly Soil Properties Evaluation by Large Scale In-Situ Cyclic Shear Tests, Takaaki Konno, Munenori Hatana-ka, Kenji Ishihara, Yukimi Ibe and Setsuo lizuka, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p177-200.

Landfill Liner Interface Strengths from Torsional-Ring-Shear Tests, Timothy D. Stark and Alan R. Poeppel, GT

Mar. 94, p597-615.

Model Prediction of Anisotropic Behavior of Boston Blue Clay, Andrew J. Whittle, Don J. DeGroot, Charles C. Ladd and Tian-Ho Seah, GT Jan. 94, p199-224. Strength of FRC Corbels in Flexure, Nijad I. Fattuhi, ST

Feb. 94, p360-377.

Uplift Capacity of Small-Diameter Drilled Shafts from In Situ Tests, Alan J. Lutenegger and Gerald A. Miller, GT Aug. 94, p1362-1380.

Analysis of Free Vibrations of Tall Buildings, Qiusheng Li, Hong Cao and Guiqing Li, EM Sept. 94, p1861-1876.

Concrete Buildings in Regions of High Seismicity, S. K. Ghosh, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p31-36.

Experimental Study of Thin Steel-Plate Shear Walls under Cyclic Load, Vincent Caccese, Mohamed Elgaaly and Ruobo Chen, ST Feb. 93, p573-587.

Finite Element Modeling of Concrete Expansion and Confinement, F. J. Vecchio, ST Sept. 92, p2390-2406.

GLG Grand, Atlanta Design and Construction, Martin R. Ocon, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p25-30.

Macroelement Model for Shear Wall Analysis, Jerome M. James and Sashi K. Kunnath, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1505-1512.

Messeturm Tower: Frankfurt, Germany, Irwin G. Cantor and Ahmad Rahimian, (Structures Congress XII, N. C Baker, ed. and Barry J. Loodno, ed., 1994), p1550-1555.

New Methodology for Seismic Design of RC Shear Walls, John W. Wallace, ST Mar. 94, p863-884.

Postbuckling Behavior of Steel-Plate Shear Walls under Cyclic Loads, M. Elgaaly, V. Caccese and C. Du, ST Feb. 93, p588-605.

A Probabilistic Approach to the Response of Tall Buildings to Wind Loadings, Morteza A. M. Torkamani and Ramadan S. Murad, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1439-1444.

Seismic Upgrades Using Energy Dissipation Devices, David Bleiman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1274-1279.

Shear Effects on the Free Vibrations of Coupled Shear Walls, G. Q. Li and B. S. Choo, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1727-1734. Shear Effects on the Static Behaviour of Stiffened Pierced

Walls, B. S. Choo and G. Q. Li, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1719-1726. Stiffness of Low Rise Reinforced Concrete Shear Walls, Working Group on the Stiffness of Concrete Shear Wall

Structures, Structural Division, ASCE, (R.C. Murray, chmn.), 1994, 0-7844-0060-1, 196pp.

Structural Reliability Analysis of Masonry Shear Walls, George T. Zorapapel, Gary C. Hart and Dan M. Frango-pol, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p205-210.

Strut-Tie Model Design of Disturbed Regions in Concrete Structures, Y. M. Yun, A. Alshegeir and J. A. Ramirez, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p233-238.

Where are the Shear Resistors? (ltr), CE June 94, p38.

Shear waves

Effects of Multiple Modes on Rayleigh Wave Dispersion Characteristics, Kohji Tokimatsu, Shuji Tamura and Hisaya Kojima, GT Oct. 92, p1529-1543

In-Situ Measurements of Dynamic Soil Properties and Liq-uefaction Resistances of Gravelly Soils at Keenleyside Dam, Ken K. Y. Lum and Li Yan, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p221-240.

A User Friendly Microcomputer Program for Liquefaction Potential Analysis, A. H. Wu, J. S. Hsu and A. Urzua, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p843-848.

Sheet piling

Building A Barrier Wall Through Boulders, Donald R. McMahon, Michael J. Mann and Robert C. Tulett, CE Oct. 94, p60-62.

Sheets

- Composite Walls as Shear Elements in Tall Structures, Howard Wright, Anwar Hossain and Stewart Gallocher, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p140-145.
- Compression Strength of Pultruded Flat Sheet Material, J. T. Mottram, MT May 94, p185-200.

Shell structures

- Analysis of Arch Dams, Alexander Michael Ansah, ST May 93, p1516-1538.
- Flat Plates with Regular and Irregular Column Layouts.1: Analysis, Kolbjorn Saether, ST May 94, p1563-1579.
- Flat Plates with Regular and Irregular Column Layouts.II: Numerical Evaluations, Kolbjorn Saether, ST May 94, p1580-1598.
- Lower Bounds for Overall Buckling of Spherical Space Domes, M. Kashani and J. G. A. Croll, EM May 94, p949-970.
- Nonlinear Geometric and Material Behavior of Shell Structures with Large Strains, S. A. Schimmels and A. N. Palazotto, EM Feb. 94, p320-345.
- Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994, 0-87262-953-8, 1115pp.
- Study of Interaction Between Pneumatic Spherical and Cylindrical Form Shells Subjected to Wind Pressure, D. Beilin and V. Polyakov, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1082-1093.

Shel

- Adaptability of Translation-Grid Shells, J. G. Oliva Salinas, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p133-141.
- Axisymmetric Vibrations of Thick-Walled Cylindrical Tubes in the Presence of Thermal Residual Stresses, Victor Birman, (Engineering, Construction, and Operations in Space IV, Rodney G, Galloway, ed. and Stanley Lokaj, ed., 1994), p257-265.
- Blast Demolition of Reinforced Concrete Industrial Chimneys, Friedhelm Stangenberg, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p290-299.
- Comparison of Two different Models of a Shell Roof, Oscar A. Andrés, Néstor F. Ortega and Carlos A. Schiratti, (*Spatial, Lattice and Tension Structures*, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p320-329.
- Concrete Shells Today, Heinz Isler, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p820-836.
- Design for Durability for Large Reinforced Concrete Shells, Wilfried B. Krätzig, Konstantin Meskouris and Karsten Gruber, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p897-906.
- Dynamic Characteristics of Translational Lattice Domes, Celina U. Penalba, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p269-279.
- Experimental Study on a Buckling Behavior of a Wooden Single-Layer Space Frame of Reticular Shell on a Hexagonal Plan: Influence due to the Bolted Joint Looseness with Axial and Bending Resistance, Kouichi Matsuno and Shigeru Aoki, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p152-161.

- Field Measurements of Tensile Forces on a Spherical Dome Sector Caused by Internal Load of a Granular Product in Storage, Jack L. Brunk, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p172-179.
- hp Version of Finite-Element Mixed Method, Michelle M. Crull and P. K. Basu, EM Nov. 94, p2342-2360.
- An Integrated Shell (ROSS3) for Transport Modeling, Visualization, and Data Management, Keerthisiri S. Angammana, Poojitha D. Yapa and Hung Tao Shen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p150-154.
- Modal Interaction in the Response of Laminates, Jamal F. Nayfeh, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p89-98.
- Non-Linear Solution Methods for Shell and Spatial Structures, M. Papadrakakis, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p180-189.
- Nonlinear Analysis of a Reinforced Concrete Folded Plate Structure, Pattabhi Sitaram, Stuart Swartz and Chidambaram Channakeshava, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed. 1994), p857-866.
- Nonlinear Behavior of Northlight Reinforced Concrete Shells, P. Srinivasa Rao and S. Duraiswamy, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p837-846.
- Punching Shear of Reinforced Concrete Shell Structures, Gajanan M. Sabnis and Amjad A. Shadid, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p907-916.
- Repair of a Cracked Cooling Tower Shell Based on Numerical Simulations, Thomas Huemer, Christian Kropik, Herbert A. Mang and Günther Meschke, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p887-896
- Research of Strength and Deformations with Long-time Loading and the Use of Glassibler Reinforced Concrete in Shells, G. K. Khaidukov and M. M. Lachinov, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p340-349.
- Spatial Structures Erected out of Thin Shell Elements Fabricated on Plane Followed by Bending, Vladimir V. Shugaev, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p867-876.
- Stability Analysis of Stiffened Plates and Shells, U. Jäppelt and H. Rothert, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p917-926.
- Steady-State Analysis of Buckle Propagation, André Nogueira and John L. Tassoulas, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1514-1519.
- Stress and Displacement of Thick Doubly Curved Laminated Shells, Chih-Ping Wu and Chi-Chuan Liu, EM July 94, p1403-1428.
- Study on Reinforced Concrete Cylindrical Shells with Edge Members under Impact Loading, Kazuhiko Mashita, Hidehiro Yoshitake, Masaya Noguchi and Masatoshi Hotta, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p847-856.
- Topology Optimization of Plate and Shell Structures, K. Maute and E. Ramm, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994b, p946-955.
- Ultimate Strength of R/C Cooling Tower Shell, Takashi Hara, Shiro Kato and Hiroshi Nakamura, (Spatial, Lartice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p877-886.

Vertical Displacement Induced in Soil by Conical Shell Foundations, Mohamed Abdel-Rahman and Adel Hanna, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p937-948.

Ship bridge collision

Horizontal and Vertical Movements of Bridge Piers Subjected to Ship Impact, Naresh C. Samtani, Jaw-Nan Wang, Frank Pepe, Jr. and Michael J. Abrahams, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p245-256.

Shipbuilding
Ship Fabrication Innovations (Naval & Commercial), Raymond H. Juers and Kevin Lynaugh, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p344-350.

Shipping
A Comparison of Spent-Fuel Shipping Cask Response to
10 CFR 71 Normal Conditions and Realistic Hot Day
Issues Manson and Steven Eric Extremes, Steven James Manson and Steven Eric Gianoulakis, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p788-795.

Dry Storage and Transportation of Failed Fuel, Robert D. Ouinn and Brandon D. Thomas, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p949-954.
Effects of Axial Burnup Distributions on the Reactivity of Spent Fuel, Theodore A. Parish, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p744-751.

High-Burnup/Low Cooling-Time Fuel Carrying Capacity of the GA-4 and GA-9 Spent Fuel Shipping Casks, J. K. Boshoven and J. E. Hopf, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p913-917.

The Navigation Data Center and Its Role in Dredging Management, Virginia R. Pankow, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p490-498.

Phased and Layered Sampling for Navy Dredging, Sherry L. Ashbaugh, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1436-1440.

Qualification Leak Testing of the GA-4 and GA-9 Closure Seal Design, Richard H. Boonstra, (High Level Radioactive Waste Management, High Level Radioactive Waste

Program Committee, 1994), p923-930.

Stakeholder Involvement in the Evaluation of a Multipurpose Canister System, Susan Smith, Pete Bolton and Tim Dantoin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p314-1-314-6.

Study for Deepening of the Martin Garcia Channels at Rio de la Plata, Uruguay, D. W. Yang and J. Bonasia, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1091-

1100

System Impacts of Fuel (Age and Burnup) Selection, Flora Emami, William Bailey and Mark Fleming, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1538-1542.

The Tracking of High Level Waste Shipments—Transcom System, P. E. Johnson, D. S. Joy, R. B. Pope, T. M. Thomas and P. B. Lester, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1242-1248.

Ships

Compressive Strength of Large Scale HSLA-80 Steel Cel-lular Sections of a Double Hull Ship Structure, Alan Ah-Kum Pang, James M. Ricles, Le-Wu Lu and Perry Green, (Structures Congress XII, N. C. Baker, ed. and

Barry J. Loodno, ed., 1994), p1538-1543.
Effects of Commercial Vessel Passage in Narrow Channels
With and Without Ice Cover, John G. Lyon, Donald C.
Williams and Kevin G. Flannigan, CR June 94, p47-64.

Metamodeling Approach for Approximating the Operating Characteristics of Series of G/G/1 Queues on Congested Waterways, Melody, D. M. Dai and Paul Schonfeld, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p490-497.

The Navigation Data Center and Its Role in Dredging Management, Virginia R. Pankow, (Dredging '94, E.

management, virginia R. Pankow, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p490-498.

A New Correction Procedure for Shipborne Wave Recorder Data, E. G. Pitt, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p726-739.

Phased and Layered Sampling for Navy Dredging, Sherry L. Ashbaugh, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1436-1440.

Retrofit Racks for Revenues, Patrick Farrell, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p499-505.

Simulation Modeling Drystack Marina Facilities, Jeffrey G. Shelden and Kerry Simpson, (Marinas, Parks and Rec-reation Developments, Marshall Flug, ed. and Fred A.

Klancnik, ed., 1994), p587-596. Strategic Ship Routing Impacts of Temporal Coverage with Real-time Satellite Altimeter-Based Current Information, Young-Kyun Lee, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p483-489.

596

Anomalous Dispersion Paradox in Shallow Water Gravity Waves Shoaling Over Slopping Bottom, S. Yu. Kuznesov and N. S. Speransky, Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p364-373.

Assessment and Recommendations for the Enhancement of the Bardawil Lagoon Outlets, Alfy M. Fanos, Ahmed A. Khafayg, Mohamed N. Anwar and Mary G. Naffaa, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p189-

A Comparison of Wave Statistics in Uni- and Multidirectional Shoaling Seas, Andrew M. Cornett and Okey G. Nwogu, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p458-473.

p436-473. Evolution of Breaking Directional Spectral Waves in the Nearshore Zone, H. Tuba Özkan and James T. Kirby, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p849-863

An Offshore Island Wave Sheltering Model, Andrew L Kadib, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994),

p695-707.

On Some Hydrodynamic Effects Found in Large Scale Experiments, Nikolai S. Speranski, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p785-793.
On the Generation of Infragravity Waves by Shoaling Mul-

tidirectional Waves, Okey Nwogu, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Mi-

chael Hemsley, ed., 1994), p1-14.
Shoaling of Solitary Waves on Plane Beaches, S. T. Grilli, R. Subramanya, I. A. Svendsen and J. Veeramony, WW Nov./Dec. 94, p609-628.

Shoaling of Wave Spectra in Front of Reflective Structures, Ernest R. Smith and Steven A. Hughes, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p642-656. A Spectral Wave Model for the Coastal Zone, L. H. Hol-

Special Wave Model for the Coastal Zone, L. F. Horthujsen, N. Booij and R. C. Ris, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p630-641.

Waves Propagating on an Adverse Jet, Fredric Raichlen, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p657-670

Shock

One-Dimensional Shock and Quasi-Static Liquefaction of Silt and Sand, Jane M. Bolton, Deanna S. Durnford and Wayne A. Charlie, GT Oct. 94, p1874-1889.

Numerical Analysis of High Velocity Flow with Zero-Depth Line and Oblique Shock Wave in Steep Open-Channels, Takashi Hosoda and Nozomu Yoneyama, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1270-1274.

- Seismic Retrofit: Strengthening Stiff Columns Not the Answer (ltr), CE June 94, p38,40.
- Shock-Wave Reduction by Bottom Drop, Markus Schwalt and Willi H. Hager, HY Oct. 94, p1222-1227.
- Supercritical Flow Behind Chute Piers, Roger Reinauer and Willi H. Hager, HY Nov. 94, p1292-1308.
- 'Shock Absorbers' for Cars and Quakes, ET Oct./Nov. 94, p5.

Shore protection

- Analyzing Wave and Storm Surge Impacts from Hurricane Andrew on the Dade County Beach Erosion Control and Hurricane Protection Project, Kimberley A. Taplin and Jon M. Hubertz, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), 9587-596.
- Case Study of Navy Pier Pile Foundation Installation, Richard A. Nebel, II and Jeffrey S. Russell, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p311-320.
- Characteristics of Solitary Wave Breaking Induced by Breakwaters, Stéphan T. Grilli, Miguel A. Losada and Francisco Martin, WW Jan/Feb. 94, p74-92.
- An Experimental and Analytical Study of the Shoreline Response to Non-Parallel Breakwaters in Oblique Waves, Michael E. McCormick and Richard W. Gordon, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p251-263.
- Fraser Lands Riverfront Park Shoreline Edge Treatments, Stanley R. Cowdell and Harold C. Westerman, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p114-123.
- Include Recreational Benefits in Beach Protection, CE July 94, p6.
- Irregular Wave Run-Up on Composite Rough Slopes, Marek Szmytkiewicz, Ryszard B. Zeidler and Krystian W. Pilarczyk, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p599-613.
- Modelling Large-Scale Coast Evolution, Zbigniew Pruszak and Ryszard B. Zeidler, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p446-461.
- Nutrient Retention Time in High-Permeability, Oil-Fouled Beach, William R. Wise, Oktay Güven, Fred J. Molz and Steve C. McCutcheon, EE Nov./Dec. 94, p1361-1379.
- Performance of Nearshore Berm Disposal at Port Canaveral, Florida, Kevin R. Bodge, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1182-1191.
- Pot-Nets, Delaware, Wetland Habitat and Beneficial Uses of Dredged Material Project, Edward T. Fulford and Robert E. Tunnell, Jr., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1451-1460.
- Review of Works Using CRIEPI Flume and Present Work, Ryoichi Kajima and Tsutomu Sakakiyama, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p614-627.
- Uncertainty and Time Preference in Shore Protection, Kevin O'Grady and Leonard Shabman, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p136-154.
- Validation of a Continental-Scale Storm Surge Model for the Coast of Delaware, David J. Mark and Norman W. Scheffner, *Estuarine and Coastal Modeling III*, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p249-263.

Shoreline changes

Benefits of Hazard Mitigation Planning to Reduce Shoreline Impacts Due to Great Lakes Water Level Management Fluctuations and Severe Storms, Robert Naim and Darryl Hatheway, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p182-186.

- An Experimental and Analytical Study of the Shoreline Response to Non-Parallel Breakwaters in Oblique Waves, Michael E. McCormick and Richard W. Gordon, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p251-263.
- History of Entrance Channel Dredging and Disposal Operations: St. Marys, Georgia/Florida, Joan Pope, J. Bailey Smith and Laurel T. Gorman, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p906-917.
- Port Authority's Role in Inlet Management and Beneficial Use of Dredged Material, Malcolm E. McLouth, Joseph Lapolla and Kevin Bodge, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p971-980.
- Recent Improvement of Gao Qiao New Channel on Huangpu River, Guoxian Zhu, WW July/Aug. 94, p368-381.
- The Response of a Barred Coast to a Sequence of Storms, Felix C. J. Wolf, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p44-58.
- Shoreline Solution for Tapered Beach Fill, Todd L. Walton, Jr., WW Nov./Dec. 94, p651-655.
- Velocity Moments on a Macro-Tidal Intermediate Beach, Yolanda L. M. Foote and David A. Huntley, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p794-808.

Shor

- Bender Park Development Milwaukee County, Wisconsin, Rob Montgomery, Barry Murray and Paul Hathaway, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p460-469.
- The TMA Wave-Energy Constraint and Cohesive Shore-Profile Shapes, Charles N. Johnson, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p236-250.

Shoring

Soil Nailing Saves Distressed Timber Wall, James Harmston and Gary W. Rhodes, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p130-136.

Shotcrete

- Evaluation of Shotcrete Efficiency in Sewers Rehabilitation, Youssef Georges Diab, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p928-935.
- Flat-Plate Repairs Using Innovative Shotcrete Applications, Avanti C. Shroff and Indrajit M. Mehta, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p971-982.
- High Strength Shotcrete and Concrete on the SSC Project, Leon A. Berdugo, Prabir Das and C. J. Roth, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p761-766.
- An Overview of Shotcrete Usage on the SSC, Steven H. Baldauf, (Structures Congress XII, N. C. Baker, ed. and Barry I. Londro, ed. 1994) p773-778
- Barry J. Loodno, ed., 1994), p773-778.

 Performance of Gunite Brow Ditches, Robert W. Day, IR Sept./Oct. 94, p957-963.
- Steel-Fiber-Reinforced Wet-Mix Shotcrete: Comparisons with Cast Concrete, Nemkumar Banthia, Jean-François Trottier and Denis Beaupré, MT Aug. 94, p430-437.

Shrinkag

- Compacted Clay Liners and Covers for Arid Sites, David E. Daniel and Yung-Kwang Wu, GT Feb. 93, p223-237.
- Creep Analysis of Composite Steel-Concrete Members with Deformable Connectors, F. Mola, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p737-742.
- Creep and Shrinkage Deflections of RC Beams with Steel Fibers, Kiang-Hwee Tan, P. Paramasivam and Kah-Chai Tan, MT Nov. 94, p474-494.
- Creep Effects in Composite Beams with Flexible Shear Connectors, Angelo Marcello Tarantino and Luigino Dezi, ST Aug. 92, p2063-2081.
- Creep in Composite Continuous Beams. II: Parametric Study, Luigino Dezi and Angelo Marcello Tarantino, ST July 93, p2112-2133.
- Long-Term Deflection of RC Beams, W. A. M. Alwis, A. Olorunniwo and K. K. Ang, ST July 94, p2220-2226.

Performance of Slab-on-Grade Foundations on Expansive

Soil, Robert W. Day, CF May 94, p129-138.
Predicting Creep and Shrinkage Effects in Cracked Concrete Elements, A. S. Prasada Rao, R. Jayaraman, V. Vimalanandam and S. Sai Babu, ST Sept. 94, p2784-2792

Rational Limits for Longitudinal Steel in Concrete Columns, ASCE-ACI Committee 441-Concrete Columns. Subcommittee on Longitudinal Reinforcement Limits, (Furlong, Richard W., chmn.), (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p438-443

Reliability Analysis of Creep and Shrinkage Effects, C. Q. Li and R. E. Melchers, ST Sept. 92, p2323-2337.

Swell-Shrink Behavior of Compacted Clay, Robert W.

Day, GT Mar. 94, p618-623.

Time-Dependent Behavior of RC Members Strengthened
With FRP Laminates, Nikolaos Plevris and Thanasis C.

Triantafillou, ST Mar. 94, p1016-1042.
Time-related Deflections of Cantilever Bridges, Cornelis van der Veen, Marcel van Vliet and Ane de Boer, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p922-929.

Sight

Effect of Restriction of Vision on Driving Performance, Rod Troutbeck and Joanne M. Wood, TE Sept./Oct. 94,

Sign supports

Automated Design of 3-D Highway Sign Bridge Structures, C. C. Fu, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p930-937.

Colorful Signs Could Save Lives, CE Nov. 94, p8.

Signal processing

Vibration Testing for Nondestructive Evaluation of Bridg-es. I: Theory, Mahmod M. Samman and Mrinmay Biswas, ST Jan. 94, p269-289. Vibration Testing for Nondestructive Evaluation of Bridg-

es. II: Results, Mahmod M. Samman and Mrinmay Biswas, ST Jan. 94, p290-306.

Signal usage

Colorful Signs Could Save Lives, CE Nov. 94, p8.

A Study of Communication Signal Leakage Through the Earth's Ionosphere Using Ray-Tracing Techniques, M. McCoy and J. P. Basart, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p553-561.

Signalized intersections

Colorful Signs Could Save Lives, CE Nov. 94, p8.

Probabilistic Delay Model at Stop-Controlled Intersection, Samer M. Madanat, Michael J. Cassidy and Mu-Han Wang, TE Jan./Feb. 94, p21-36.

Amplified Microbending in Coated Optical Fibres, John Roorda, EM Apr. 94, p917-921.

Engineering Implications of Levitating Lunar Dust, Freder-Engineering Implications of Levitating Lunar Dust, Frederick A. Slane, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1097-1105.
Simulation of Multi-Dimensional, Anisotropic Ground Motions, O. Ramadan and M. Novak, EM Aug. 94, p1773-1706.

1785

Signs

Colorful Signs Could Save Lives, CE Nov. 94, p8. FEM in a Design Code Environment, Philip V. DeSantis and James E. Wild, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p454-461.

Characteristics of Silica-Fume Concrete, Safwan A. Khedr and Mohamed N. Abou Zaid, MT Aug. 94, p357-375.

Effect of Fly Ash and Silica Fume on Alkali Silica Reactions, Mette Geiker and Niels Thaulow, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p123-136.

Integration of Multiple Advanced Analytical Techniques to Study Alkali Silica Reactivity in Concrete Railroad Ties, R. J. Lee, A. J. Schwoeble, K. E. Wagner and J. Yuan, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p217-229.

Optimization of Curing of Silica Fume Concrete, Mohammad Shamim Khan and Michael E. Ayers, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p820-827.

Service Life Prediction, ASR Deterioration, Toy S. Poole and G. Sam Wong, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p16-26.

Silica Fume (Microsilica) Fundamentals for Use in Concrete, Mark D. Luther and Philip A. Smith, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p75-

An Ultra-Lightweight Advanced Technology Telescope for Space Applications, P. C. Chen, R. J. Oliversen, H. Hojaji, W. K. Chu and T. L. Wilson, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1422-1430.

Progress in Understanding the Structure and Thermodynamics of Calcium Silicate Hydrates, Annemarie Meike, Maria Onofrei, Carol J. Bruton and Brian E. Viani, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2590-2596.

Cylinderical Shells, P. L. Gould, R. V. Ravichandran and S. Sridharan, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p927-935.

Out-of-Plane Buckling of Restrained Thin Rings of General Open Section, J. G. Teng and R. M. Lucas, EM May

94, p929-948.

Plastic Collapse at Lap Joints in Pressurized Cylinders under Axial Load, Jin-Guang Teng, ST Jan. 94, p23-45.

Settlement of a Silo Subjected to Cyclic Loading, Marco Favaretti and Alberto Mazzucato, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p775-785

Development of a Long-Term Dredged Material Management Plan Chincoteague, Virginia, Tom B. Langley, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p359-367

Dynamic Compaction of Saturated Silt and Silty Sand - A Case History, Jean C. Dumas, Nelson F. Beaton and Jean-François Morel, (In-Situ Deep Soil Improvement,

Kyle M. Rollins, ed., 1994), p80-89.

Experimental Study of the Settlement of Shallow Foundations, Samuel Amar, François Baguelin, Yves Canépa and Roger Frank, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1602-1610.

Hyperbolic Stress-Strain Parameters for Silts, Timothy D. Stark, Robert M. Ebeling and Joseph J. Vettel, GT Feb.

94, p420-441.

Laboratory and Field Leaching Tests on Coastal Salt-Bearing Soils, Nabil F. Ismael, GT Mar. 93, p453-470.

Liquefaction Characteristics of Silts, Sukhmander Singh, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p105-116.

Management of Recharge Dams in Saudi Arabia, Fouad F. Al-Muttair, Uygur Sendil and Abdulaziz S. Al-Turbak, WR Nov./Dec. 94, p749-763.

Piezometer Performance at Wildlife Liquefaction Site, California, T. Leslie Youd and Thomas L. Holzer, GT June 94, p975-995.

Silty soils

Case Study of Debris Flow, Robert W. Day, CF Aug. 94, p192-200.

Earthquake-Induced Settlements in Silty Sands for New England Seismicity, Cetin Soydemir, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p77-90.

Ground Failures Under Seismic Conditions, Geotechnical Special Publication No. 44, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994, 0-7844-0055-5, 260pp.

The Influence of Fines Type and Content on Cyclic Strength, Joseph Patrick Koester, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p17-33.

Liquefaction in Silty Soils: Design and Analysis, W. D. Liam Finn, R. H. Ledbetter and Guoxi Wu, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p51-76.

Liquefaction of Artificially Filled Silty Sands, Susumu Yasuda, Kazue Wakamatsu and Hideo Nagase, (Ground Failures Under Seismic Conditions, Shamsher Prakash,

ed. and Panos Dakoulas, ed., 1994), p91-104. Liquefaction of Silty Soils, Y. P. Vaid, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and

Panos Dakoulas, ed., 1994), p1-16.

"Dynamic Compaction Used as a Winter Construction Expedient", Lawrence F. Johnsen and Christopher Tonzi, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p68-79.

Similitude

Modeling Impact of Armour Blocks, M. A. G. Silva, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p187-204.

Simulation

Application of Fracture Mechanics to Soils: An Overview, Luis E. Vallejo, (Fracture Mechanics Applied to Geo-technical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p1-20.

Application of Virtual Reality to Space Robotics Operations, David A. Read, Ken J. Ruta and Bradley N. Bell, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p19-27.

Automated Construction-Simulation Optimization, Simaan AbouRizk and Jingsheng Shi, CO June 94, p374-385.

Automated Sensor Tester, Dave Hayward, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and

Paul R. Klarer, ed., 1994), p158-165.

Change in Gasoline Constituent Mass Transfer During Soil Venting, Nancy J. Hayden, Thomas C. Voice, Michael D. Annable and Roger B. Wallace, EE Nov./Dec. 94, p1598-1614.

Combination of an Automated Channel Network Extract-ing System and a Distributed Watershed Model in Estimation Rainfall-Runoff Processes, Ray-Shyan Wu, Yi-Shao Lai and Cheng-Hsung Liu, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p356-360.

Computation Method for Regulating Unsteady Flow in Open Channels, Fubo Liu, Jan Feyen and Jean Berlamont, IR Sept./Oct. 92, p674-689.

Computer-Assisted Instruction in Civil Engineering, Thomas Froese, Sundar Prasad, Jeff Friesen and Dan Zollman, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1647-1654.

Construction Operations on the OUTPOST Platform in Orbit, Thomas C. Taylor, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed.

and Stanley Lokaj, ed., 1994), p423-432.

A Coupled Mass Transfer and Surface Complexation Model for Uranium (VI) Removal from Wastewaters, lebb Lobber Linde A English and Surface Complexation. John Lenhart, Linda A. Figueroa and Bruce D. Honey-man, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p249-256.

Damage Tolerance of Thin Composite Reinforced Membrane Structures, Levon Minnetyan, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p296-305.

Developing Plans for Robotic Excavators, Sanjiv Singh, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p88-96.

Development and Application of a Three-Dimensional Boundary-Fitted Circulation Model in Providence River, Muslim Muin and Malcolm Spaulding, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p432-446. Development of Long-Term Three-Dimensional Hydrody-namics in Long Island Sound for Use in Water Quality Modeling, Richard A. Schmalz, Jr., (Hydraulic Engi-neering '94, George V. Cotroneo, ed. and Ralph R. Ru-mer, ed., 1994), p1316-1320.

Development of Stochastic Indicator Models of Lithology, Yucca Mountain, Nevada, Christopher A. Rautman and Thomas H. Robey, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Com-

mittee, 1994), p2510-2519.

Distributional Information for Ejection Fragments, Eric P. Steinberg, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p402-413.

Downstream Control Algorithm for Irrigation Canals, Fubo Liu, Jan Feyen and Jean Berlamont, IR May/June 94,

p468-483.

599

Dynamic Simulation of Tractor-Trailer-Cask System Used in Nuclear Waste Transportation, Zekai Ceylan and Cahit Evrensel, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p934-941.

Effects of Force Reflection on Telerobotic Performance, Raymond Dick, Terry Faddis and Bill Barr, (Robotics for Challenging Environments, Laura A. Demsetz, ed.

and Paul R. Klarer, ed., 1994), p259-268.

Effects of Simulated Ice on the Performance of Price Type-AA Current Meter Rotors, Janice M. Fulford, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p251-258.

Estimating Construction Productivity: Neural-Network-Based Approach, Li-Chung Chao and Miroslaw J. Skib-niewski, CP Apr. 94, p234-251.

Estimation of Directional Spectra by ML/ME-Methods, Ola Haug and Harald E. Krogstad, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p394-405.

Estimation of Field Site Flow Parameters, Yahia Majali, Salwa Rashad, John Hoopes and Tswn-Syau Tsay, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p303-307.

Evaluating an Autoregressive Model for Stream Flow Forecasting, Yuan Cheng, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1105-1109.

Evaluating Methods for Statistical Analysis of Less than Detection Limit Data Using Simulated Small Samples 2 General Results, Joan U. Clarke, (Dredging '94, E. Clark

McNair, Jr., ed., 1994), p747-755.

Experimental Measurements of Dynamic Loads Imposed by Moving Crowds, A. Ebrahimpour, R. L. Sack, W. N. Patten and A. Hamam, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1385-1390.

Expert Analysis in Regulated Irrigation Canal Modelling, Forrest M. Holly, Jr. and John P. Parrish, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R.

Rumer, ed., 1994), p92-96.

Extensive Comparison of Directional Wave Analysis Methods From Gauge Array Data, Michel Benoit, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p740-

Extreme Winds Estimation by 'Peaks Over Threshold' and Epochal Methods, J. L. Gross, N. A. Heckert, J. A. Lechner and E. Simiu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1472-1477.

Fast Monte Carlo Simulations and Safety Index Checking, A. Sellier and A. Mébarki, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p260-265.

Fatigue Damage Accumulation Under Stochastic Stress Histories, Shahram Sarkani, Naser K. Buresli and George Michaelov, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p839-844.

Fortification of MMOC Models for Steep-Channel Flows, Chintu Lai, Der-Liang Young and Jen-Ter Chang, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1290-1294. A Gaming Analysis of Drought-Coping Policy Options, James L. Henderson, William B. Lord and Russell L. Gum, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p620-623.

Geostatistics for Fracture Characterization, R. Mohan Srivastava and Bruce M. Davis, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p2131-2138. High-Resolution Upwind Schemes for Solving Mass Transport Equation, Jihn-Sung Lai, Hsieh Wen Shen and Dihua Zhao, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p497-

Historical Rainfall-Runoff Analysis Using the Antecedent Precipitation Index, B. J. Doeing, R. A. Gaines and T. M. James, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1095-1099

Human Error Models for Structural Reliability, Eric P. Steinberg, (Structures Congress XII, N. C. Baker, ed.

and Barry J. Loodno, ed., 1994), p199-204.

Ice Accumulation Rate and the Geometry of Ice Jams in River Bends, Gilberto E. Urroz and Robert Ettema, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p386-390.

Ralph R. Rumer, ed., 1994), p386-390.
Impulse Effect on Redundancy of a Tied-Arch Bridge, Leon L-Y. Lai, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p712-719.
An Integrated Approach To Repetitive Construction Planning, Boliver A. Senior and Daniel W. Halpin, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), 25-52. p25-32.

Interactions Between the Space Station Freedom Attitude Control System and Space Shuttle Remote Manipulator Controller During On-Orbit Assembly Operations, James T. Kaidy, Jalal Mapar and Ben C. Barker, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p433-452. Intercomparison of Extremal Wave Analysis Methods

Using Numerically Simulated Data, Yoshimi Goda, Peter Hawkes, Etienne Mansard, Maria Jesus Martin, Martin Mathiesen, Eric Peltier, Edward Thompson and Gerbrant van Vledder, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p963-977.

JSC-1: A New Lunar Soil Simulant, David S. McKay, James L. Carter, Walter W. Boles, Carlton C. Allen and

Jadines L. Catter, Watter W. Soles, Catton C. Alleta had Judith H. Allton, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), 8857–866.

Kwicklis, Edward M. Alan L. Flint and Richard W. Health Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2341-2351.

The Levitation of Lunar Dust Via Electrostatic Forces, S. Doe, J. O. Burns, D. Pettit, J. Blacic and P. W. Keaton, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p907-915.

Local Web Crippling of Unstiffened Multi-Cell Box Sections, Mark R. Kaczinski, Christopher R. Schneider, Robert J. Dexter and Le-Wu Lu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994),

p343-348.

Lunar Oxygen Production - A Maturing Technology, Carl-ton C. Allen, Gary G. Bond and David S. McKay, (Engi-neering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1157-1166.

Luo, Ming, Weiiin Xu and Huasheng Liao, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R.

Rumer, ed., 1994), p1009-1013.

Model Studies of Effects on Lunar Soil of Chemical Explosions, Chaun-Ping Lin, Deborah J. Goodings, Leonhard E. Bernold, Richard D. Dick and William L. Fourney, GT Oct. 94, p1684-1703.

Modeling Initial Mixing of Ocean Wastewater Discharges to Develop Toxic Effluent Limitations, Christopher C. Obropta and Scott T. Taylor, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1047-1054. Modeling of Cyclic Moment-Rotation Response of Dou-ble-Angle Connections, Mario De Stefano, Antonello De Luca and Abolhassan Astaneh-Asl, ST Jan. 94, p212-229

Modeling Operational Activities in Object-Oriented Simulation, Amr A. Oloufa, CP Jan. 93, p94-106.

The MOUSE Uncertainty Analysis System, Albert J. Klee, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p372-379.

Multi-Reservoir System Simulation Design Using C++ and Object Oriented Programming, Jesse Perla and K. Pon-nambalam, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1030-

Multimedia Based System for Analyzing Production Or-ganizations, Hans C. Björnsson and Per Sagert, (Computing in Civil Engineering, Khalil Khozeimeh, ed.,

1994), p1405-1411.

Nearshore Breaking Waves: A Numerical Model, Scott L. Douglass and Juan C. Ortiz, Cocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p864-879.

A Novel Gravity Compensation System for Space Robots, H. B. Brown, Jr. and J. M. Dolan, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul

R. Klarer, ed., 1994), p250-258.

Numerical Simulation of One Dimensional Transcritical Flow, Ehab A. Meselhe, Fotis Sotiropoulos and Forrest M. Holly, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p512-516.

Numerical Simulation of Site Effects, Apostolos S. Papageorgiou, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p567-572.

On Habitat Simulation in Mountain Rivers, Robert T. Milhous, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p850-854

Oxygen Generation from Synthetic Moon Soil Using a Plasma Reactor, P. R. Taylor, S. A. Pirzada, K. A. Prisbrey, H. Gold and R. E. Hicks, (Engineering, Construc-tion, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1178-1187.

Passenger-Terminal Simulation Model, José Reynaldo Setti and Bruce G. Hutchinson, TE July/Aug. 94, p517-535.

Performance of New York's Long-span Bridges, Satinder P. S. Puri, Richard J. Kratky and Maria Grazia Bruschi, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1022-1031.

Pile Settlement Based on Dynamic Measurements, Samuel G. Paikowsky, Valerie A. LaBelle, John E. Regan and Les R. Chernauskas, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p269-278.

Prediction of Structural Response to Large Earthquakes by Using Recordings From Smaller Earthquakes, Erdal Safak, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1391-1396.

Pressure-Driven Gas Flow in Heated, Partially-Saturated Porous Media, Franklin T. Dodge and Ronald T. Green, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

Probabilistic Modeling of Scheduling Uncertainty: Methods and Tools, Ali Touran, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p380-383.

Problems of Stream Flood Simulation and Prediction, Shou-shan Fan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1110-

Random Vortex Models in Wind Engineering, George Turkiyyah, Dorothy Reed and Jiyao Yang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

Range Estimating -- User-Friendly Risk Analysis, Kevin M. Curran, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p47-54.

Reliability Analysis of Creep and Shrinkage Effects, C. Q. Li and R. E. Melchers, ST Sept. 92, p2323-2337.

Second Order Directional Wave Kinematics in Shallow Water, Jagat N. Sharma and R. G. Dean, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p165-179.

Sediment Deposition and Entrapment in Vegetated Streambeds, Steven R. Abt, Warren P. Clary and Christopher I. Thornton, IR Nov./Dec. 94, p1098-1111.

A Simple Method of Producing Lunar Soil Simulants for Engineering Studies, Koon Meng Chua, Scott Pringle and Stewart W. Johnson, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p867-877.

Simulated Seismic Load Tests on Reinforced Concrete Columns, S. Watson and R. Park, ST June 94, p1825-

Simulated Waste Package Test in Salt, Hemendra N. Kalia, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1930-1937.

Simulating Learning Development for Construction, James D. Lutz, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1655-1662.

Simulating Structural Analysis with Neural Network, James

L. Rogers, CP Apr. 94, p252-265.

Simulating Water Supply Systems of the Raritan Basin, Michael Bennett, Marshall R. Taylor, Che-Hsun Wan and Daniel P. Loucks, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p433-436.

Simulation of Autonomous Robotic Excavation, Regis Hoffman and Reid Simmons, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer,

ed., 1994), p115-122.

Simulation of Blast Pressure on Flexible Panels, Avinash C. Singhal, Debra Larson, Sanjay Govil and Vikram

Karmakar, ST July 94, p2011-2020.

Simulation of Heat Transfer Around a Canister Placed Horizontally in a Drift, Samir Moujaes and Akshay Bhargava, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p801-808.

Simulation of Multi-Dimensional, Anisotropic Ground Motions, O. Ramadan and M. Novak, EM Aug. 94, p1773-

Simulation Procedure for Buckling Behaviors of a Reticular Dome, Shiro Kato, Hideyuki Takashima, Isao Kubodera and Takashi Ueki, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and

Celina U. Penalba, ed., 1994), p460-468.
Simulation Verifies Queuing Program for Selecting Loader-Truck Fleets, Foad Farid and Thomas L. Koning,

CO June 94, p386-404.

Sintering Bricks on the Moon, Carlton C. Allen, John C. Graf and David S. McKay, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1220-1229.

A Space Station Simulation: EXEMSI '92 A Study on Confinement and Isolation of a Mixed Crew of Four during 60 Days, J. Collet, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p494-503.

State and Resource Based Construction Process Simula tion, Julio Martinez, Photios G. Ioannou and Robert I. Carr, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p177-184.

Statistical Considerations on Large-Scale Geomechanics Test Design For Nuclear Waste Repository Characterization, Kunsoo Kim and Hang Gao, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1922-1929.

Statistical Response of a Class of Hysteretic Systems, I. I. Orabi and G. Ahmadi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p405-410.

Structural Response to 3D Simulated Earthquake Motions in San Bernardino Valley, Erdal Şafak and Arthur Frankel, ST Oct. 94, p2820-2839.

Synthetic Wind for Investigations in Time-Domain, Imre Kovacs, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p900-905. Theory and Observation of Currents and Setup Over a Shallow Reef, Graham Symonds, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p1-13.

Three Dimensional Simulation of Progressive Tunneling Process for Lining Design of Intersecting Tunnels in Soft Rock, Liqiu (Lichu) Guan, Steven H. Baldauf and Wern-Ping (Nick) Chen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2006-2013.

Three-dimensional Modeling for Improving Construction Process Performance, Amarjit Singh, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p1156-1163.

Using Interactive Simulation to Explore Drivers' Response to Visual Information Systems, Jeffrey L. Adler, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1735-1742.

Wetting Phase Permeability in a Partially Saturated Horizontal Fracture, M. J. Nicholl and R. J. Glass, (High Level Radioactive Waste Management, High Level Ra dioactive Waste Program Committee, 1994), p2007-

Simulation models

3D CAD Modeling and Graphical Simulation of Mobile Cranes, Parmanand V. Dharwadkar, James T. O'Connor and Thomas M. Gatton, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p539-546.

A-Tough: A Multimedia Fluid-Flow/Energy-Transport Model for Fully-Coupled Atmospheric-Subsurface Interactions, Parviz Montazer, Dale Hammermeister and Joseph Ginanni, (High Level Radioactive Waste Manage-ment, High Level Radioactive Waste Program Commit-

tee, 1994), p2333-2340.

The Aeolus Project: Measuring Coastal Wind and Sediment Systems, D. J. Sherman, B. O. Bauer, R. W. G. Carter, D. Jackson, J. McCloskey, R. G. D. Davidson-Arnott, P. A. Gares, N. L. Jackson and K. F. Nordstrom, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p476-487.

Application of the PCRSS Reservoir Simulation Model to the Salt River Project, Jon S. Behrens and Yvonne Reinink, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p295-298.

Conjunctive Operation of Hydroelectric and Thermal Power Plants, Ricardo Harboe, Tirtha Raj Gautam and Pushpa Raj Onta, WR Nov./Dec. 94, p778-793.

A Decision Support System for Multi-Purpose Reservoir Operations, S. B. Shim, H. S. Lee, K. K. Koh, K. D. Shim and D. G. Fontane, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p303-306.

A Decision Support System for Nonpoint Source Pollution Management Using a Distributed Model-GIS-DBMS Linkage, Jaewan Yoon and G. Padmanabhan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p402-409.

DETMOD: A Desktop Estuarine Transport MODel, David G. Kleinschmidt and Bryan R. Pearce, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p1032-1038.

Development and Application of Long Range Study (LRS) Model for Missouri River System, George A. Patenode and Karen L. Wilson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p677-680.

Development of a Wetland/Riparian Resource Model for the Missouri River System, C. McShane, D. Becker, R. Tressler, J. Cannon and J. Rude, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p746-749.

Development of Environmental Impacts Model for Missouri River System, Robert Loveless and Ray Walton, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p754-757.

Development of Transport Model for Groundwater Planning and Management in Taipei Basin, Nien-Sheng Hsu, Ming-Jame Horng, Chian Min Wu, William W-G. Yeh and Jan-Tai Kuo, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p332-335.

Effect of Testing Variability on Contractor Payment for Asphalt Pavements, Serji N. Amirkhanian, James L. Burati, Jr. and Harish C. Mirchandani, CO Sept. 94,

p579-592.

Effects of Commercial Vessel Passage in Narrow Channels With and Without Ice Cover, John G. Lyon, Donald C. Williams and Kevin G. Flannigan, CR June 94, p47-64.

A Goal Driven Approach to Discrete Event Simulation, Abdullah M. Alsugair and David Y. Chang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p515-522.

Good Software, and It's Free, Too, David Angelotti, CC

June 94, p1-6.

Groundwater Model Simulation of Chemical Transport Groundwater Model Simulation of Chemical Transport from a Nearshore Confined Sediment Disposal Facility, Michael Riley, Gopal Biswas, Charles Boatman, Robert Brockhaus, Mark Utting and Doug Hotchkiss, (*Dredging* '94, E. Clark McNair, Jr., ed., 1994), p1517-1526. Heat Transfer Effects in Vertically Emplaced High Level

Nuclear Waste Container, Samir F. Moujaes and Yao M. Lei, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p816-822

Hurricane Windspeeds at Inland Locations, P. J. Vickery and L. A. Twisdale, (Structures Congress XII, N. C Baker, ed. and Barry J. Loodno, ed., 1994), p473-478.

Integration of Water Rights and Salinity Considerations in Comprehensive River Basin Management, Ralph A. Wurbs, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p396-399.

Intelligent Design and Remediation of Shallow Landfill Burial Systems, James C. Ascough, II, Leonard J. Lane and Thomas E. Hakonson, (Computing in Civil Engi-neering, Khalil Khozeimeh, ed., 1994), p257-264.

Managing Reservoir Storage for Fish Production, Terry Waddle and Jeff Sandelin, (Water Policy and Manage ment: Solving the Problems, Darrell G. Fontane, ed. and

ment: Solving the Problems, Darrelt O. Forhane, ed. and Harry N. Tuvel, ed., 1994), p49-52.

Metamodeling Approach for Approximating the Operating Characteristics of Series of GiG/I Queues on Congested Waterways, Melody, D. M. Dai and Paul Schonfeld, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p490-497.

Modeling Cap Placement at New York Mud Dump Site, Robert E. Randall, James E. Clausner and Billy H. John-son, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994),

p1295-1304.

Navigation Channel Design Using Real-Time Marine Simulator, Dennis W. Webb, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1081-1090.

Optimization and Reservoir Operations for the Missouri River, Inês C. L. Ferreira and Jay R. Lund, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p93-96. Optimization of Reservoir Releases to Control River Sedi-

mentation Using Differential Dynamic Programming, Carlos C. Carriaga and Larry W. Mays, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p13-16.

A Physically Based Conceptual Model for Simulating Contaminant Levels in Subsurface Water, Miguel A. Mejia, Mohamed M. Hantush and Miguel A. Mariño, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p355-

Plain flooding: near field and far field simulations, G. Braschi, F. Dadone and M. Gallati, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro,

ed. and Luigi Natale, ed., 1994), p45-59.

Predicting Hydrologic Impacts of a Severe and Sustained Drought on the Colorado River Basin, Taiye B. Sangoyomi and Benjamin L. Harding, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p616-619.

Predicting Wave Spectra With a Third Generation Spectral Wave Model, Charles L. Vincent, Ph.D., Robert E. Jensen, Ph.D. and Hans C. Graber, Ph.D., (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p420-432.

A Predictive Hydrologic Model for Contaminant Leaching

and Liner Effectiveness at Dredged Material Confined Disposal Facilities, Nadim M. Aziz, Paul R. Schroeder and Tommy E. Myers, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1507-1516.

PROSIM - A Water Rights-Based Operational Simulation Model of the Provo River, Steven M. Thurin, Paul C. Summers and P. Kirt Carpenter, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p578-581.

Quantification of the Mechanisms Controlling the Removal Rate of Volatile Contaminants by Air Sparging, Gretchen L. Hein, Neil J. Hutzler and John S. Gierke, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p556-563

Risk Simulation Model for Rehabilitation Studies, Richard Males, David Moser, Michael Walsh, Walter Grayman and Craig Strus, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p274-279.

Sewerage Failure, Diagnosis and Rehabilitation, J. W. Delleur, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Pro-

grams and Techniques, ASCE, 1994), p11-28.
Sewerage Rehabilitation Verified Simulation Modeling, Phil Wildbore, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p73-83.

Simplified Simulation Model Development for Construction Projects, Amr A. Oloufa, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p362-367.

Simulating Hourly Hydropower Operations for the Assessment of Environmental and Economic Impact, David A. Harpman, A. Spreck Rosekrans and Ronald E. Moulton, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p553-556.

Simulation Modeling Drystack Marina Facilities, Jeffrey G. Shelden and Kerry Simpson, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A.

Klancnik, ed., 1994), p587-596.

Simulation of Wave and Beach Profile Change in SUPER-TANK Seawall Tests, William G. McDougal, Nicholas C. Kraus and Harman Ajiwibowo, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p278-295.

A Speed Prediction Model for New Zealand Highways, Christopher R. Bennett and Roger C. M. Dunn, (Computing in Civil Engineering, Khalil Khozeimeh, ed.,

1994), p728-734.

Stream Water-Temperature Sensitivity to Weather and Bed Parameters, Bashar A. Sinokrot and Heinz G. Stefan, HY

June 94, p722-736.

Systems Modeling for the DOE Spent Nuclear Fuel Program, Dennis Evans, Corey Beebe, Michael Caldwell, Brett Carlsen, Gina Ban, David Van Haaften and Scott Gladson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p331-337.

Tests for Biogenic Sulfuric Acid Corrosion in a Simulation Chamber Confirms the On Site Performance of Calcium Aluminate Based Concretes in Sewage Applications, Wolfgang Sand, Thierry Dumas, Serge Marcdargent, Albert Pugliese and Jean-Louis Cabiron, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p35-55.

A Three-Dimensional Numerical Simulation of Seasonal Flow and Salt Transport in the C&D Canal, Bernard B. Hsieh, David R. Richards and Jeff Gebert, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p595-599.

- Trihalomethanes in Chlorinated Sacramento-San Joaquin Delta Drinking Water Simulated with the EPA WTT-THM Model, Russ T. Brown, Doug Brewer, Doug Owen and Zaid Chowdhury, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p492-500.
- Turbidity and Contaminant Release During Dredging of Contaminated Sediments, Ronald W. van Oostrum and Peter Vroege, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p210-219.
- Water Resource Modeling and Consensus Building, Steven M. Thurin and Rick J. Cox, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p473-476.
- WATSUP: A Simulation Model for Water Supply Cost and Reliability, Mark R. Jensen and Jay R. Lund, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p806-809
- Wet Detention Facility Pollutant Removal Modeling, Thomas R. Sear and Herbert M. Raybourn, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p830-833.

Sinkholes

Cover-Subsidence Sinkhole Evaluation of State Road 434, Longwood, Florida, Jon Foshee and Brian Bixler, GT Nov. 94, p2026-2040.

Sinhons

- Algorithm for Siphon-operated LPD Sewage Manifolds, Dennis L. Kaiser, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p424-438
- Rehabilitation of Belle Isle Siphon in Boston, Massachusetts, Emile Hamwey and Lisa Harris, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p.247-256.
- Yellowman Siphon Rehabilitation, Scott A. Stevens, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p82-88.

Site evaluation

- 1993 Recreational Vehicle (RV) Park Census in Beatty and Pahrump, Nevada, Lloyd E. Levy and Marcia D. Housel, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p48-55.
- Active Versus Passive Radon Monitoring at the Yucca Mountain Site, Michael D. Griffin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1953-1958.
- Detailed Characterization and Preliminary Adsorption Model for Materials for an Intermediate-Scale Reactive-Transport Experiment, David B. Ward, Charles R. Bryan and Malcolm D. Siegel, (*High Level Radioactive Waste Management*, High Level Radioactive Waste Program Committee, 1994), p2048-2062.
- Development of a Long-Term Dredged Material Management Plan Chincoteague, Virginia, Tom B. Langley, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p359-367.
- Development of Functional Characteristics of Vehicle Mounted Plastic Scintillation System, John G. Follette, Jeffrey J. Tappen and Christopher T. Briggs, (*High Level Radioactive Waste Management*, High Level Radioactive Waste Program Committee, 1994), p1964–1970.
- Disposal of Contaminated Sediments in NY/NJ Harbor, Joel A. Pecchioli, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p606-615.
- Effects of Site Conditions of Earthquake-Resistant Design of Structures, Vitelmo V. Bertero and Eduardo Miranda, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), 9561-566.
- Integrated Acoustic Seafloor Characterization, Peggy Murray, Ed DeAngelo, Jeff Parker and Thomas J. Fredette, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p295-303.

- Late Cenozoic Evolution of Fortymile Wash: Major Change in Drainage Pattern in the Yucca Mountain, Nevada Region During Late Miocene Volcanism, Scott C. Lundstrom and Richard G. Warren, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2121-2130.
- Late Glacial to Modern Climate Near Yucca Mountain Nevada, Richard M. Forester, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2750-2754.
- Mat Foundation Design: An Historical Perspective, Edward J. Ulrich, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p107-120.
- New Approaches for Determination of Rock and Rock Mass Properties at Dredging Sites, Hardy J. Smith, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p259-268.
- Numerical Modeling of Salt Transport at a Solid Waste Disposal Site Capped With Coastal Dredged Material, Ram Krishnamohan, John B. Herbich and Fred S. Williams, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1152-1161.
- Numerical Simulation of Site Effects, Apostolos S. Papageorgiou, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p567-572.
- Potential Economic Benefits of the Yucca Mountain Project, Richard A. Babcock, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p642-649.
- Preliminary Analysis of Three-Dimensional Moisture Flow Within Yucca Mountain, Nevada, Gudmundur Bodvarsson, Gang Chen and Caroline Wittwer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p.2038-2047.
- Settlement Analysis for 450 Meter Tall KLCC Towers, Clyde N. Baker, Jr., Ir. Tarique Azam and Len S. Joseph, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1650-1671.
- Site Characterisation and Performance Assessment in the Swiss Nuclear Waste Disposal Programme: Benefits from the Second NAGRA/USDOE Project Agreement, S. Vomvoris, P. Zuidema and P. Blümling, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2616-2623.
- Site Characterization by Artificial Neural Networks, Donna M. Rizzo, David E. Dougherty and Theodore P. Lillys, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p250-253.
- Site Effects on Strong Shaking and Seismic Risk: Recent Developments and Their Impact on Seismic Design Codes and Practice, Raymond B. Seed, Stephen E. Dickenson and Chin Man Mok, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p573-578.
- Standards and Regulations for Geologic Disposal of High Level Waste: An Issues Framework, S. S. Sareen, S. J. Brocoum and T. A. Cotton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), pl 393–1396.
- Statistical Considerations on Large-Scale Geomechanics Test Design For Nuclear Waste Repository Characterization, Kunsoo Kim and Hang Gao, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1922-1929.
- Treatment of Uncertainty in the NRC Regulatory Process, J. Michael McGarry, III and F. Stanley Echols, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1404-1416.
- The Use of Coda Waves for Characterizing the Site Effect on Strong Ground Motion, Keiiti Aki and Byau-Heng Chin, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p579-584.

Site investigation

Application of Studies on the Overboard Placement of Dredged Sediments to the Management of Disposal Sites, William Panageotou and Jeffrey Halka, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p349-358.

A Borehole Instrumentation Program for Characterization of Unsaturated-Zone Percolation, Jack Kume and Joseph P. Rousseau, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Commit-

tee, 1994), p2076-2083.

Building A Barrier Wall Through Boulders, Donald R.
McMahon, Michael J. Mann and Robert C. Tulett, CE

Oct. 94, p60-62.

Computer Applications in Liquefaction Analysis, Sivanuja S. Sundaram and K. K. Muraleetharan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p123-130.

Damage to Highway Infrastructure 1993 Mississippi River amage to rightway infrastructure 13 Amages and D. J. Hagerty, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p26-30.

Disposal Site Capping Management: New Haven Harbor, Thomas J. Fredette, (*Dredging '94*, E. Clark McNair, Jr.,

ed., 1994), p1142-1151.

The Generation and Use of Site Specific Wave and Current Databases for Dredged Material Fate Predictions, Norman W. Scheffner, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p190-199.

In Situ Stress Determination Research Study, William G. Austin and Paul M. Thompson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2429-2436.

Integrated GIS for Construction Site Investigation, Amr R. Oloufa, Ahmed A. Eltahan and C. S. Papacostas, CO Mar. 94, p211-222.

Management of San Diego Bay Dredged Material Dispos-al, Dan Muslin, (*Dredging '94*, E. Clark McNair, Jr., ed.,

1994), p332-341. 1994), p.32-341.
Monitoring Petroleum Contamination in an Aquifer, Paramesh Anantharaman and Joseph C. Cataldo, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p.272-276.
Quality Assurance for Hazardous-Waste Projects, N. S. Shashidhara, CE Dec. 94, p.66-68.
Site Characterization and Related Activities at the Potential High Level Padiocetive Waste Perpositors Site of Viscos.

High-Level Radioactive Waste Repository Site at Yucca Mountain, Nevada, Carl P. Gertz, Paul L. Cloke, Robert M. Nelson, Jr. and Maxwell B. Blanchard, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2291-2296

Site Investigation Surveys for Dredging Projects, S. J. Plasman and J. Peuchen, (*Dredging '94*, E. Clark McNair,

State Parameter from Self-Boring Pressuremeter Tests in Sand, H. S. Yu, GT Dec. 94, p2118-2135.

Advertising Public Outreach: Going Where the People Are, Douglas Bradford and Daniel Burns, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p76-82.

Biological and Physical Characterization of a Deep-Ocean Disposal Site off Northern California, James A. Blake, Catherine A. Courtney, Barbara Hecker, Brigitte Hilbig, Jo Ann Muramoto and Donald C. Rhoads, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p111-120.

Environmental Justice: Implications for Siting of Federal Radioactive Waste Management Facilities, J. Bennett Easterling and James S. Poles, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p63-67.

Exploratory Studies Facility Test Implementation and Integration with Construction and Design, Deirdre M. Boak, Ned Z. Elkins, Richard Kovach and Ronald D. Oliver, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1770-1773.

The French Mediation Mission: Siting of Underground Re-search Laboratories, Christian Bataille, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p249-257. Gravelly Soil Properties Evaluation by Large Scale In-Situ Cyclic Shear Tests, Takaaki Konno, Munenori Hatana-ka, Kenji Ishihara, Yukimi Ibe and Setsuo Iizuka, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p177-200.

Growing Interest, Growing Programs, Growing Pains: Suc-cessfully Customizing Public Outreach, Mindy Wadkins, Carleen Hill and Theresa Hirsch, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p232-237

Guidance for Wetland Restoration with Dredged Material, Michael R. Palermo and Elba A. Dardeau, Jr., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p956-960. Heuristic Algorithm to Locate Solid-Waste Disposal Site,

Narayanaswamy V. Ramu and William J. Kennedy, UP

Mar. 94, p14-21.

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Integrated Geology and Preliminary Cross Section Along the North Ramp of the Exploratory Studies Facility, Yucca Mountain, D. C. Buesch, R. P. Dickerson, R. M. Drake and R. W. Spengler, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

ransic Management, High Ever Radioactive Waste Flogram Committee, 1994), p1055-1065.

Long Term Nuclear Criticality Potential in Waste Packages, Daniel A. Thomas and Thomas W. Doering, (High Level Radioactive Waste Management, High Level Ra-

Level Radioactive Waste Management, Filigh Level Ra-dioactive Waste Program Committee, 1994), p838-844. Management of Dredged Material Disposal for San Fran-cisco Bay Projects, Thomas H. Wakeman and Jacob Harari, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p484-489.

Management of San Diego Bay Dredged Material Dispos-al, Dan Muslin, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p332-341.

Monitored Retrievable Storage: A Test of Cultural Values nontored Retrievable Storage: A less of Cultural values and A Symbol of Tribal Sovereignty, W. A. White-Tail Feather, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p68-75.

Nuclear Word Images as Policy Instruments, Janet S.

Conary and Dennis L. Soden, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p121-130.

Optimal Land Allocation for Solid- and Hazardous-Waste Landfill Siting, S. Diane Minor and Timothy L. Jacobs, EE Sept./Oct. 94, p1095-1108.

The Politics of Nuclear-Waste Disposal, Paul Tarricone, CE Mar. 94, p56-58.

Preliminary Results of Investigation of the Ukrainian Shield Geological Formations for Radioactive Wastes Disposal, L. S. Galetsky, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1886-1890.

Repository Program Licensing Approach, Thomas M. Williamson and April VanCamp Gil, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1585-1592.

Simultaneous Routing and Siting for Hazardous-Waste Operations, Timothy L. Jacobs and John M. Warmerdam, UP Sept. 94, p115-131.

Site Characterization Plan Thermal Goals Reevaluation, Steven F. Saterlie and J. C. de la Garza, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p882-889.

Site Selection for Beneficial Uses Of Dredged Material in Galveston Bay, Texas, USA, Russell Swafford and Richard F. Gorini, (Dredging '94, E. Clark McNair, Jr.,

ed., 1994), p399-409.

The Sundance Fault: A Newly Recognized Shear Zone at Yucca Mountain, Nevada, R. W. Spengler, C. A. Braun, L. G. Martin and C. W. Weisenberg, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p2359-2366.

Use of An Analog Site Near Raymond, California, To Dese of Art Arthurd Stee Near Augmond, Camonina, 10 Develop Equipment and Methods for Characterizing a Potential High-Level, Nuclear Waste Repository Site at Yucca Mountain, Nevada, Amjad M. J. Umari, Arthur Geldon, Gary Patterson, James Gemmell, John Earle and Jon Darnell, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Commit-tee, 1994), p2413-2422.

Voluntary vs. Directed Siting - Or Somewhere In-Between? Elizabeth Peelle, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p201-212.

What's Science Got To Do With It?: The Use of Public Opinion in Developing Nuclear Waste Policy, Eric B. Herzik and John L. Dobra, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), pl 12-120.

Site selection studies

Preliminary Assessment of Potential Sites for a Monitored Retrievable Storage (MRS) Facility, Lois S. Smith, Thomas H. Rogers, Arthur Dailey and Jeffrey R. Williams, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1372-1379.

Site Characterization and Related Activities at the Potential High-Level Radioactive Waste Repository Site at Yucca Mountain, Nevada, Carl P, Gertz, Paul L. Cloke, Robert M. Nelson, Jr. and Maxwell B. Blanchard, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2291-2296.

Site surveys

Generic Data Acquisition System for Robotic Waste Characterization, John T. Feddema and Barry L. Spletzer, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p320-328. An Intelligent Robotic Vehicle for Lunar/Martian Applica-

An Intelligent Robotic Vehicle for Lunar/Martian Applications, Fei-Yue Wang, Michael Marefat, Paul J. A. Lever and Larry Schooley, (Robotics for Challenging, Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p193-201.

Size

Does Reentrainment Occur During Cohesive Sediment Settling? Y. L. Lau and B. G. Krishnappan, HY Feb. 94, p236-244.

Effect of Orientation and Size of Helley-Smith Sampler on Its Efficiency, Jocelyn M. Gaudet, André G. Roy and James L. Best, HY June 94, p758-766.

Riprap Sizing for Modified ARS-Type Basin, Steven R. Abt, Glenn B. Hamilton, Chester C. Watson and John Smith, HY Feb. 94, p260-267.

Runoff Detention for Flood Volume or Erosion Control, A. Osman Akan and Edward N. Antoun, IR Jan./Feb. 94,

p168-178

Transfer Vehicle Sizing for Missions to Mars, James P. Masciarelli, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1355-1364.

Water-Level Control in Hydropower Plants, Oscar F. Jiménez and M. Hanif Chaudhry, EY Dec. 92, p180-193.

Size effec

Flexural Strength of Fiber Cementitious Composites, Mohamed Maalej and Victor C. Li, MT Aug. 94, p390-406

Fractals, Fractures, and Size Effects in Concrete, Victor E. Saouma and Christopher C. Barton, EM Apr. 94, p835-854.

Fracture Mechanics and Size Effect of Concrete in Tension, Tianxi Tang, Surendra P. Shah and Chengsheng Ouyang, ST Nov. 92, p3169-3185.

Fracture Size Effect: Review of Evidence for Concrete Structures, Zdeněk P. Bažant, Joško Ožbolt and Rolf Eligehausen, ST Aug. 94, p2377-2398.

Influence of Specimen Size on Effect of Curing Regime on Concrete Compressive Strength, I. Soroka and H. Baum, MT Feb. 94, p15-22.

Penetration Fracture of Ice Plate: 2D Analysis and Size Effect, Yuan-Neng Li and Zdeněk P. Bažant, EM July 94, p1481-1498.

Penetration Fracture of Sea Ice Plate: Simplified Analysis and Size Effect, Zdeněk P. Bažant and Yuan-Neng Li, EM June 94, p1304-1321.

Scaling Laws in Mechanics of Failure, Zdeněk P. Bažant, EM Sept. 93, p1828-1844.

Sediment Feed and Recirculating Flumes: Fundamental Difference, Gary Parker and Peter R. Wilcock, HY Nov. 93, p1192-1204. Size Effect in Fiber or Bar Pullout with Interface Softening Slip, Zdeněk P. Bažant and Rodrigue Desmorat, EM Sept. 94, p1945-1962.

Storm and Entrainment Effects on Tributary Sediment Loads, Deborah H. Lee, Keith W. Bedford and Chieh-Cheng J. Yen, HY Jan. 94, p81-103.

Skew bridges

Collapse Loads of Continuous Skew Composite Bridges, Alaa Helba and John B. Kennedy, ST May 94, p1395-1414.

Parametric Study on Collapse Loads of Skew Composite Bridges, Alaa Helba and John B. Kennedy, ST May 94, p1415-1433.

Skewness

Bridge Buffeting by Skew Winds in Erection Stages, Robert H. Scanlan, EM Feb. 93, p251-269.

Distributions of Envelope and Phase in Weakly Nonlinear Random Waves, M. Aziz Tayfun, EM May 94, p1009-1025.

Stability of Skew Mindlin Plates under Isotropic In-Plane Pressure, C. M. Wang, S. Kitipornchai, Y. Xiang and K. M. Liew, EM Feb. 93, p393-401.

Skiins

Building the Perfect Ski Slope?, CE Mar. 94, p10.

Skin friction

Design of Socketed Drilled Shafts in Limestone, M. C. McVay, F. C. Townsend and R. C. Williams, GT Oct. 92, p1626-1637.

Slab

ATLSS Connectors in Semi-Rigid Composite Connections, Alan M. Rosa, Le-Wu Lu and B. Vincent Viscomi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1149-1154.

Combined Boundary Element / Finite Strip Analysis of Bridges, M. S. Cheung, Georges Akhras and W. Li, ST

Mar. 94, p716-727.

Deformations in Composite Prestressed Concrete Bridge Deck Panels, Robert E. Abendroth, ST Nov. 94, p3223-3242.

Design of Prestressed Hollow Core Slabs with Reference to Web Shear Failure, Lin Yang, ST Sept. 94, p2675-2696.

Different Approaches to Rating Slab Bridges, Vikas Huria, Kuo-Liang Lee and Ahmet E. Aktan, ST Oct. 94, p3056-3062.

Dynamic Modeling of Slab Formwork during Concrete Placement, Saeed Karshenas and Stephen M. Heinrich, ST July 94, p2199-2217.

Earthquake Response of Flat-Slab Buildings, Ahmad J. Durrani, S. T. Mau, Amr Ahmed AbouHashish and Yi Li, ST Mar. 94, p947-964.

Effect of Orientation of Approach Slabs on Pavement Deformation, H. K. W. Wong and J. C. Small, TE July/Aug. 94, p590-602.

Equivalent Frame Analysis of Flat Plate Buildings for Seismic Loading, Y. H. Luo, A. J. Durrani and J. P. Conte, ST July 94, p2137-2155.

Finite Element Modeling of Continuous Posttensioned Voided Slab Bridges, Rajan Sen, Mohsen Issa, Xianghong Sun and Antoine Gerges, ST Feb. 94, p651-667.

Foundation Slab for Lunar Base Construction, Mikiya Okumura, Yasuhiro Ohashi, Takao Ueno, Shojiro Motoyui and Kiosuke Murakawa, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1128-1137.

Hydrodynamic Forces in Hydraulic Jump Stilling Basins, António N. Pinheiro, António C. Quintela and Carlos M. Ramos, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p321-330.

Influence of Membrane Forces on Transverse-Shear Reinforcement Design, Perry Adebar and Weishi He, ST Apr. 94, p1347-1366.

Moments in Deck Slabs Due to Cantilever Loads, Aftab A. Mufti, Baidar Bakht and Leslie G. Jaeger, ST June 93, p1761-1777. Nonlinear Finite Element Analysis of Deteriorated RC Slab Bridge, B. M. Shahrooz, I. K. Ho, A. E. Aktan, R. de Borst, J. Blaauwendraad, C. van der Veen, R. H. Iding and R. A. Miller, ST Feb. 94, p422-440.

Nonlinear Finite Element Analysis of RC Slab Bridge, Vikas Huria, Kuo-Liang Lee and A. Emin Aktan, ST Jan.

Performance of Slab-on-Grade Foundations on Expansive Soil, Robert W. Day, CF May 94, p129-138.

Punching Shear Strength of Steel Fiber Reinforced Concrete Slabs, Kiang-Hwee Tan and P. Paramasivam, MT May 94, p240-253.

Reinforced-Concrete Dimensioning Based on Element Nodal Forces, E. Anderheggen, Z. Despot, P. Steffen and S. M. R. Tabatabai, ST June 94, p1718-1731.

Seismic Vulnerability of Flat Slab - Core Buildings, Somaprasad R. Hosahalli and Ahmet E. Aktan, ST Feb. 94, p339-359.

Splicing Strength of Welded Steel Mesh in Concrete Bridge Decks, Bilal M. Ayyub, Naji Al-Mutairi and Peter Chang, ST Aug. 94, p2532-2546.

Standard for the Structural Design of Composite Slabs (ANSI/ASCE 3-91) Standard Practice for Construction and Inspection of Composite Slabs (ANSI/ASCE 9-91) (St No. 91-003, 91-009), American Society of Civil Engineers, 1994, 0-87262-954-6, 90pp.

Survey Results for Concrete Construction Live Loads on Newly Poured Slabs, Haitham Ayoub and Saeed Karshe-

nas, ST May 94, p1543-1562.

Thermal Response in Antenna Under Laser Irradiation, Leslie A. Blackham and Arsalan Razani, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p196-205.

Waterproofing a Structural Slab at Ground Anchor Locations, David L. Druss, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p77-92.

By-Product of Sulfur Recovery from Phosphogypsum as Concrete Aggregate, Amitava Roy, Gary R. Byerly and Roger K. Seals, MT Nov. 94, p439-452.

Mineral Admixtures for Concrete - An Overview of Recent Developments, P. K. Mehta, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p243-256.

Rebar Corrosion and Sulfate Resistance of Blast-Furnace Slag Cement, A. S. Al-Gahtani, Rasheeduzzafar and S.

S. Al-Saadoun, MT May 94, p223-239.

Utilization of Phosphogypsum-Based Slag Aggregate in Portland Cement and Asphaltic Concrete Mixtures, Paul T. Foxworthy, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p75-

Slenderness ratio

The Slender Tower of 52-54 East End Avenue, Ahmad Rahimian, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1562-1567

Slenderness K factor for Leaning Columns, J. Dario Aristizabal-Ochoa, ST Oct. 94, p2977-2991.

Case Study of Debris Flow, Robert W. Day, CF Aug. 94, p192-200.

Sliding

Discontinuous Control of Seismic-Excited Nonlinear and Hysteretic Structures, J. N. Yang, Z. Li and J. C. Wu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p393-398.

Limit States Analysis of Masonry Arches, Thomas E. Boothby, (Structures Congress XII, N. C. Baker, ed. and

Barry J. Loodno, ed., 1994), p797-802.

Micromechanics Modeling for Stress-Strain Behavior of Granular Soils. II: Evaluation, Ching S. Chang, Mohammed G. Kabir and Yang Chang, GT Dec. 92, p1975-

Nonlinear Earthquake Analysis of Concrete Gravity Dams Including Sliding, Juan W. Chávez and Gregory L. Fenves, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p173-182.

Permanent Deformation on Preexisting Sliding Surfaces in Dams, George Gazetas and Nasim Uddin, GT Nov. 94, p2041-2061.

606

Algorithm for Hysteresis Analysis of Prestressed-Concrete Frames, Xiaozu Su and Bolong Zhu, ST June 94, p1732-1744.

Carpet Flow Analysis, Yonas Kinfu and Michael C. Quick, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1161-1165.

Nonlinear Analysis of Two-Layered Wood Members with Interlayer Slip, Dan L. Wheat and Jose M. Calixto, ST June 94, p1909-1929.

Pullout of Inclined Fibers from Cementitious Matrix, C. Ouyang, A. Pacios and S. P. Shah, EM Dec. 94, p2641-2659.

Size Effect in Fiber or Bar Pullout with Interface Softening Slip, Zdeněk P. Bažant and Rodrigue Desmorat, EM Sept. 94, p1945-1962.

Slip surface

Unified Formulation for Analysis of Slopes with General Slip Surface, R. D. Espinoza, P. L. Bourdeau and B. Muhunthan, GT July 94, p1185-1204.

Effect of Bolt Slippage on Ultimate Behavior of Lattice Structures, S. Kitipornchai, F. G. A. Al-Bermani and A. H. Peyrot, ST Aug. 94, p2281-2287.

Slope deflection method

A Simplified Method of Multistory-frame Analysis Including the P-Δ Effect, Hani Melhem and Khalid Niazi, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1302-1309.

Design and Installation of a New Settlement-Inclinometer Device, R. G. Campanella, R. S. Jackson, J. A. R. Ortigao and C. B. Crawford, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p911-922.

Effect of Permeability on Surficial Stability of Homogene-ous Slopes, Daniel Pradel and Glen Raad, GT Feb. 93, p315-332

Gully Erosion Minimization on Reclaimed Surface Mines Using SSAST Computer Model, Rose A. McKenney and Thomas W. Gardner, IR Sept./Oct. 94, p910-924.

Landfill Liner Interface Strengths from Torsional-Ring-Shear Tests, Timothy D. Stark and Alan R. Poeppel, GT Mar. 94, p597-615.

Protecting a Pipeline, Manuel Garcia-Lopez and Donald H. Gray, CE Dec. 94, p44-47.

Pseudostatic Seismic Stability of Slopes: Design Charts, Dov Leshchinsky and Ka-Ching San, GT Sept. 94, p1514-1532.

Reliability Applied to Slope Stability Analysis, John T. Christian, Charles C. Ladd and Gregory B. Baecher, GT Dec. 94, p2180-2207.

Stability of Shale Embankments, Tien H. Wu, Brian W. Randolph and Chiung-Shiann Huang, GT Jan. 93, p127-146.

Surficial Stability of Compacted Clay: Case Study, Robert W. Day, GT Nov. 94, p1980-1990.

Undrained Shear Strength of Liquefied Sands for Stability Analysis, Timothy D. Stark and Gholamreza Mesri, GT Nov. 92, p1727-1747.

Unified Formulation for Analysis of Slopes with General Slip Surface, R. D. Espinoza, P. L. Bourdeau and B. Muhunthan, GT July 94, p1185-1204.

Slope stabilization

Fiber Matrix Bonds Soil to Charred Hills, CE June 94, p91.

Comparison of Models for Subsurface Drainage in Flat and Sloping Lands, E. Lorre, B. Lesaffre and R. W. Skaggs, IR Mar./Apr. 94, p266-277.

Damage Mechanisms and Influence of Gradation for Steep Riprap, Karol Rohan, Mahrez Ben Belfadhel, Oscar Dascal and Guy Lefebvre, GT Mar. 94, p514-527.

Deformation of Fill Slopes Caused by Wetting, Iraj Noorany, Joel A. Sweet and Ian M. Smith, (Stability and Performance of Slopes and Embankments II, Raymond B. Seed, ed. and Ross W. Boulanger, ed., 1992), p1244-1257.

Design of Sewers Based on Minimum Velocity, Ismail I.

Esen, EE May/June 93, p591-594.
Footing Modulus Near Slopes, Mark C. Gemperline, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio,

Linconsments, Albert 1. Yeung, ed. and Guy Y. Félio, ed., 1994), p1058-1070. Liquefaction-Induced Lateral Spreading of Mildly Sloping Ground, Gregg L. Fiegel and Bruce L. Kutter, GT Dec. 94, p2236-2243.

Load-Settlement Prediction of Footings on Steep Slopes, Pedro Arduino, Emir J. Macari and Mark Gemperline, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1385-1399. OTF Kinematic GPS Positioning for Vertical Reference

Datum, Al Rougeau, Dean Pottle and Larry Rosenbalm, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p288-

Performance of Gunite Brow Ditches, Robert W. Day, IR Sept./Oct. 94, p957-963.

Potential-Flow Solution to 2D Transition from Mild to

Steep Slope, J. S. Montes, HY May 94, p601-621.
Reliability Applied to Slope Stability Analysis, John T.
Christian, Charles C. Ladd and Gregory B. Baecher, GT

Dec. 94, p2180-2207.

Settlement and Deformation Response of a Bridge Footing on a Sloped Fill, Guy Y. Félio and Gunther E. Bauer, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1071-1081. Spatially Averaged Conservation Equations for Interacting

Rill-Interrill Area Overland Flows, Gokmen Tayfur and M. Levent Kavvas, HY Dec. 94, p1426-1448

Unified Formulation for Analysis of Slopes with General Slip Surface, R. D. Espinoza, P. L. Bourdeau and B. Muhunthan, GT July 94, p1185-1204.

Wave Runup on Smooth and Rock Slopes of Coastal Structures, Jentsje W. van der Meer and Cor-Jan M. Stam, WW Sept./Oct. 92, p534-550.

Sloshing

Dynamic Response of Tank Containing Two Liquids, Yu Tang, EM Mar. 93, p531-548.

Checking Concrete Growth, Vann A. Newell, David T. Tanner and Charles D. Wagner, CE Jan. 94, p70-72.

Flow Past Two-Dimensional Lateral Slot, Ramamurthy, Weimin Zhu and B. L. Carballada, EE Nov./Dec. 94, p1632-1638.

Bacterial Density Changes Across Sludge Disposal Facility, Ling Cheng, Bret Buras, D. M. Griffin, Jr. and James D. Nelson, EE Jan./Feb. 94, p138-153.
Bug-Based Process Ready to Take Toxics Out of Incinera-

tor Ash and Soil, ET Aug./Sept. 94, p1,6.
Degradation of Acetate, Propionate, and Butvrate under Shock Temperature, Mustafa Öztürk, EE Mar./Apr. 93, p321-331.

Effect of HRT on Acidogenic Digestion of Primary Sludge, P. Elefsiniotis and W. K. Oldham, EE May/June 94,

Effect of Preagitation on Freeze-Thaw-Conditioned Sludge Dewaterability, P. Aarne Vesilind and Jiann-Long Chen,

CR Dec. 94, p113-120.

Histological Analysis of Microstructure of UASB Granules, H. K. Chui and H. H. P. Fang, EE Sept./Oct.

94, p1322-1326.

Hydraulic Properties of Surface Runoff on Ash-Mixed Concrete Pavement, Reza M. Khanbilvardi and Shahriar Afshari, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p205-209.

Innovative Civil Engineering Material from Sewage Sludge: Biocement and Its Use As Blended Cement Material, Joo-Hwa Tay and Kuan-Yeow Show, MT Feb. 94,

p23-33.

Paper Sludge Can Cap Landfills, ET Dec. 94/Jan. 95, p5. Permeability Behavior of a Water Treatment Sludge, M. C. Wang and W. Tseng, GT Oct. 93, p1672-1677.

Sludge digestion

Design of Mat Foundation for Egg Shape Digesters, S. S. Ibrahim and M. R. Graves, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p13-18.

Effect of Sludge Blend on Dewatering Characteristics, Ali Davarinejad and Nikolay Voutchkov, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p273-280.

Real-Time Control of Aerobic-Anoxic Sludge Digestion Using ORP, David G. Wareham, Kenneth J. Hall and Donald S. Mavinic, EE Jan./Feb. 93, p120-136.

Turning Up the Heat to Tame Sludge, ET Dec. 94/Jan. 95, p8.

Sludge disposal

Bacterial Density Changes Across Sludge Disposal Facility, Ling Cheng, Bret Buras, D. M. Griffin, Jr. and James D. Nelson, EE Jan./Feb. 94, p138-153.

Clearing the Air About Sludge Incinerator Emissions, Phil-lip M. Martin, Eugene W. Waltz and Richard D. Kuchenrither, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p122-128.

Design/Construction of a CFD Over Dredged Sludge, Jeffrey D. Horsfall and Katherine E. Martin, (Dredging '94. E. Clark McNair, Jr., ed., 1994), p1250-1259.

Effect of Sludge Blend on Dewatering Characteristics, Ali Davarinejad and Nikolay Voutchkov, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p273-280.

Modifying One of the Nation's Most Successful Biosolids Lime Stabilization Operations, Randy Naef, Ronald J. Matheson, Mike Guthrie and Tracy Cork, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p154-161.

Sludge Hopper Design for Activated Sludge Clarifiers, O. E. Albertson, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p217-224.

Sludge drying

Effect of Sludge Blend on Dewatering Characteristics, Ali Davarinejad and Nikolay Voutchkov, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p273-280.

Ozonization of Anaerobic Sludge Dewatering Centrate for Ammonia Removal, K. Ramalingam, V. Diyamandoglu and J. Fillos, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p423-427

A Study of Alkalinity Leaching and Residual Strength of Alkaline Stabilized Sludge, Andrew P. Kruzic and Thomas M. Petry, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p129-136.

Sludge treatment

Application of Numerical Models in the Design of Clarifiers, J. A. McCorquodale and S. P. Zhou, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p186-193.

Chelating Composite Membrane: Its Application in Selective Heavy-Metal Solid-Phase Separation, Sukalyan Sengupta and Arup K. Sengupta, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p265-272.

Cladding Goes Over Eggs Easy, CE Feb. 94, p77.

Effect of Sludge Blend on Dewatering Characteristics, Ali Davarinejad and Nikolay Voutchkov, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p273-280.

Modifying One of the Nation's Most Successful Biosolids Lime Stabilization Operations, Randy Naef, Ronald J. Matheson, Mike Guthrie and Tracy Cork, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p154-161. Optimizing Secondary Clarifier Performance: A Presenta-tion Outline, John K. Esler, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p202-208.

Reducing Wastewater Sludge Pathogens Using Heat Treatment, Mark Kennedy, Kondapalli Reddy and Lyle Johnson, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p281-288.

Start-ups, CE Feb. 94, p8.

A Study of Alkalinity Leaching and Residual Strength of Alkaline Stabilized Sludge, Andrew P. Kruzic and Thomas M. Petry, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p129-136.

Slurries

Chelating Composite Membrane: Its Application in Selective Heavy-Metal Solid-Phase Separation, Sukalyan Sengupta and Arup K. Sengupta, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p265-272.

Floculation Techniques Used for Dredging Operations, Ronald H. Church, Carl W. Smith and Bernard J. Scheiner, (*Dredging '94*, E. Clark McNair, Jr., ed.,

1994), p1497-1506.

Perimeter Load Transfer in Model Drilled Shafts Formed under Slurry, R. E. Majano, M. W. O'Neill and K. M. Hassan, GT Dec. 94, p2136-2154.

Soil Washing and Biotreatment of Petroleum-Contaminated Soils, Alok Bhandari, Dennis C. Dove and John T. Novak, EE Sept./Oct. 94, p1151-1169.

Slurry pipelines

Use of Abandoned Pipeline to Transport Sediment to Marshes, Charles H. Coates, Jr., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1101-1110.

Slurry trenches

Self-Hardening Slurry Supports Shaft, CE Mar. 94, p92.

Slurry Trenching for Waterway Pipeline Installation, Samuel Carreon and Brian Doeing, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p261-279.

Slurry walls

Case Study - Performance of Diaphragm Walls During Construction; Predictions vs. Field Measurements, Abdol R. Haghayeghi and Mehrdad Mirzakashani, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p264-270.

Construction of a Cofferdam Pressure Relief System, J. Taylor, W. L. Galbraith, G. Richters, J. E. Baka and C. Chang, (Serviceability of Earth Retaining Structures,

Richard J. Finno, ed., 1994), p93-111.

Hydraulic Conductivity Assessment of Slurry Wall Using Piezocone Test, M. Manassero, GT Oct. 94, p1725-1746. Shale Slurry Walls, ET June/July 94, p11.

Sustainable Competitive Advantage for Management Consultants, Martin Betts, ME Jan./Feb. 94, p43-51.

Small crafts

Concept for a Mixed Use Recreational Harbor on Lake Superior, Kenneth M. Cobb and Dorian Grilley, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p104-113.

Measured Total Wave Climate of a Small Craft Harbor, Chuck Mesa, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed.,

1994), p90-104.

An Overview of A.S.C.E. Manual 50 "Planning and Design Guidelines for Small Craft Harbors", Fred A. Klancnik, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p196-200.

Planning and Design Guidelines for Small Craft Harbors, Revised edition (M&R No. 50), Task Committee on Marinas 2000, American Society of Civil Engineers, (Fred Klancnik, chmn.), 1994, 0-7844-0033-4, 291pp.

Small structures

Small Scale Dynamic Structures and Their Sedimentation Effects in Estuarine Environment, Chaoyu Wu and Jiaxue Wu, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p158-174.

Smerdon, Ernest T.

ASCE Elevates 13 of Its Own to Honorary Membership, NE May 94, p3.

Atlanta Ceremony Celebrates 13 New Honorary Members of ASCE, NE Dec. 94, p2-3.

Snow depth

Estimating Ground Snow Loads Using Local Climatological Data, Kenneth J. Fridley, Kathy A. Roberts and J. Bryan Mitchell, ST Dec. 94, p3567-3576.

Snow loads

Estimating Ground Snow Loads Using Local Climatological Data, Kenneth J. Fridley, Kathy A. Roberts and J. Bryan Mitchell, ST Dec. 94, p3567-3576.

Roof-Snow Load for Seismic-Design Calculations, Mi-chael J. O'Rourke and Robert S. Speck, Jr., ST Sept. 92,

p2338-2350.

What Controls the Ultimate Load of a Glulam Dome? S. M. Holzer, S. A. Kavi, S. Tongtoe and J. D. Dolan, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p86-

Snowfall

Prediction of Land Subsidence due to Ground-Water Use in Snow Country, Kazumasa Mizumura, HY Apr. 94, p448-460.

Snowpacks

Atmospheric Circulation and Snowpack in the Gunnison River Basin, Gregory J. McCabe, Jr., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p481-484.

Source-Receptor Modeling of PAHs Using Deposition Levels in Winter-Long Urban Snowpack, M. Sharma, E. McBean, N. Thomson and J. Marsalek, EE Sept./Oct. 94, p1248-1265.

Social aspects

Changing Conditions and Water Elections, Charles H. Lawrance, James M. Stubchaer and Jon A. Ahlroth, WR July/Aug. 94, p458-475.

Engineers Should Learn to Use System to Gain Respect and Money (ltr), CE Sept. 94, p32-33.

Water on Stone, Keri Wyatt Kent, WP Spring 94, p37-40.

Social communication

TRB Meeting Focuses on Istea Implementation, CE Mar. 94, p20,22

Social impact

Engineers Should Learn to Use System to Gain Respect and Money (ltr), CE Sept. 94, p32-33.

The Art of Infrastructure, Teresa Austin, CE Sept. 94, p40-43.

Engineers Should Learn to Use System to Gain Respect and Money (ltr), CE Sept. 94, p32-33.

Ethical Responsibilities of Engineering Profession, Mark J. Holliday, El July 94, p270-272.

Governmental Priorities in Irrigation Project Selection in Indonesia, Sutardi and I. C. Goulter, WR May/June 93, p406-411.

Horticultural, Botanical & Environmental Resources, Diane S. Lindsley, (), p534-535.

Intelligent Renewal Keeps Infrastructure Civil, CE Mar.

Relevant Engineering in 21st Century, Henry J. Hatch, EI July 93, p216-219.

Social values

Human-Resource Management for Twenty-First Century: Managing Diversity, Deborah A. Foley, El Apr. 94, p121-128

Integrating Ethics into Technical Curricula, Roger A. Killingsworth, Jr. and Darla J. Twale, El Jan. 94, p58-69.

Socioeconomic data

1993 Recreational Vehicle (RV) Park Census in Beatty and Pahrump, Nevada, Lloyd E. Levy and Marcia D. Housel, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

Potential Economic Benefits of the Yucca Mountain Project, Richard A. Babcock, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-gram Committee, 1994), p642-649. Structuring Category Analysis Using Statistical Technique,

V. R. Rengaraju and M. Satyakumar, TE Nov./Dec. 94, p930-939.

Wastewater Treatment Optimization Model for Developin World II: Model Testing, S. L. Tang and K. V. Ellis, EE May/June 94, p610-624.

ocioeconomic status

Engineers Should Learn to Use System to Gain Respect

and Money (ltr), CE Sept. 94, p32-33.

Testing the Spatial Neutrality of the REMI Net Migration Equation, Charles F. Barr, Nasser Daneshvary, Thomas A. Perrigo and Dan S. Rickman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p40-47.

Sociological factors

Ideal of Civil Engineering, George Bugliarello, El July 94, p290-294.

Sodium

Controlling Lead and Copper Corrosion and Sequestering of Iron and Manganese, Jonathan A. Clement, Michael Schock and Darren Lytle, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p1-8.

Arching in Piled Embankments, B. K. Low, S. K. Tang and V. Choa, GT Nov. 94, p1917-1938.

Comparison of Predicted and Measured Settlement of a Test Embankment Over Soft Soil, Kuo-Hsia Chang, William D. Kovacs and Ming-Jiun Wu, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1164-1175.

Consolidation of Ground Reclaimed by Inhomogeneous Clay, Hiroyuki Tanaka, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T.

Yeung, ed. and Guy Y. Félio, ed., 1994), p1262-1273.
Fast Foundation for Soft Clay, Joseph R. Hilton, Jr., Richard L. Novotny and Ronald E. Rager, CE Mar. 93, p62-65.

Note on Bearing Capacity of Soft Clays under Embank-ments, H. S. Yu and S. W. Sloan, GT Jan. 94, p246-255.

Performance of Embankment Stabilized with Vertical Drains on Soft Clay, B. Indraratna, A. S. Balasubramani-

am and P. Ratnayake, GT Feb. 94, p257-273. Settlement of Embankments on Soft Clays, Gholamreza Mesri, Dominic O. Kwan Lo and Tao-Wei Feng, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p8-56.

T-Bar Penetration Testing in Soft Clay, D. P. Stewart and M. F. Randolph, GT Dec. 94, p2230-2235.
Vacuum consolidation Technology-Principles and Field Experience, J. M. Cognon, I. Juran and S. Thevanayagam, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1237-1248.

Softening

Arsenic Removal Via Softening, Laurie McNeill and Marc Edwards, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p640-645.

Bar Yield Penetration in Monotonically Loaded Anchorages, John F. Bonacci, ST Mar. 94, p965-986.

Compression Response of Cracked Reinforced Concrete, F. J. Vecchio and M. P. Collins, ST Dec. 93, p3590-3610.

Constitutive Theory of Interface Behavior in Quasi-Brittle Materials, H. Y. Yang and Ming L. Wang, EM Dec. 94, p2588-2603.

Size Effect in Fiber or Bar Pullout with Interface Softening Slip, Zdeněk P. Bažant and Rodrigue Desmorat, EM Sept. 94, p1945-1962.

Tests of Yielding Anchorages Under Monotonic Loadings, John F. Bonacci and Jorge Marquez, ST Mar. 94, p987-

Petroleum Hydrocarbons in Detention-Basin Sediments, Thomas J. Maldonato and Christopher G. Uchrin, EE

May/June 94, p683-690.
Unified Critical-State Bounding-Surface Plasticity Model for Soil, Roger S. Crouch, John P. Wolf and Yannis F. Dafalias, EM Nov. 94, p2251-2270.

Use and Abuse of Settlement Analysis, Ralph B. Peck, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1-7.

Soil cement

A Deep Soil Mix Cutoff Wall at Lockington Dam, Ohio, Andrew D. Walker, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p133-145.

Strontium Isotope Geochemistry of Soil and Playa Deposits Near Yucca Mountain, Nevada, Brian D. Marshall and Shannon A. Mahan, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2685-2691.

Soil classification

Knowledge-Based Expert Systems For Geotechnical Factors in Dredging, S. Joseph Spigolon, Reda M. Bakeer and Jack Fowler, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p269-278.

Soil compaction

Compacted Clay Liners and Covers for Arid Sites, David E. Daniel and Yung-Kwang Wu, GT Feb. 93, p223-237. Compaction of Lunar-Type Soil, Leonhard E. Bernold, AS Apr. 94, p175-187.

Control of Settlement and Uplift of Structures Using Short Aggregate Piers, Evert C. Lawton, Nathaniel S. Fox and Richard L. Handy, (*In-Situ Deep Soil Improvement*, Kyle M. Rollins, ed., 1994), p121-132.

Dynamic Compaction of Loose Granular Soils: Effect of Print Spacing, Y. K. Chow, D. M. Yong, K. Y. Yong and S. L. Lee, GT July 94, p1115-1133.

Dynamic Compaction of Saturated Silt and Silty Sand - A Case History, Jean C. Dumas, Nelson F. Beaton and Jean-François Morel, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p80-89.

Dynamic Compaction to Remediate Liquefiable Embank-ment Foundation Soils, Karl Dise, Michael G. Stevens and J. Lawrence Von Thun, (In-Situ Deep Soil Improve-

ment, Kyle M. Rollins, ed., 1994), p1-25

Dynamic Compaction: Two Case Histories Utilizing Innovative Techniques, Albert A. Bayuk and Andrew D. Walker, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p55-67.

Estimating Hydraulic Conductivity of Compacted Clay Liners, Craig H. Benson, Huaming Zhai and Xiaodong

Wang, GT Feb. 94, p366-387.

Evaluation of Dynamic Compaction of Low Level Waste Burial Trenches Containing B-25 Boxes, Scott R. McMullin, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p44-54.

Nositus Cee, 1979, person.

Rostin Deep Soil Improvement, Geotechnical Special Publication No. 45, Kyle M. Rollins, ed., 1994, 0-7844-0058-X, 150pp.

Quality Management of Earthwork Using Knowledge-

based Systems, Shrinath J. Kotdawala and Imad A. Basheer, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p426-429.

Settlement of Deep Compacted Fills in California, Ernesto E. Vicente, Gerald M. Diaz and Allen M. Yourman, Jr., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1124-1134.

U.S. Experience with Dynamic Compaction of Collapsible Soils, Kyle M. Rollins and Ji-Hyoung Kim, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p26-43.

"Dynamic Compaction Used as a Winter Construction Expedient", Lawrence F. Johnsen and Christopher Tonzi, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p68-79.

Soil compressibility

Settlement of Peats and Organic Soils, Tuncer B. Edil and Evert J. den Haan, (Vertical and Horizontal Deforma-tions of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1543-1572.

Soil compression tests
Settlement of Large Mat on Deep Compressible Soil, James
P. Stewart, Hugh S. Lacy and Charles C. Ladd, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p842-859.

Soil conditions

Dynamic Compaction of Loose Granular Soils: Effect of Print Spacing, Y. K. Chow, D. M. Yong, K. Y. Yong and S. L. Lee, GT July 94, p1115-1133.

The Effect of Live Load on Downdrag Forces, Samuel A. Leifer, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and

Guy Y. Félio, ed., 1994), p949-961. Effects of Site Conditions of Earthquake-Resistant Design of Structures, Vitelmo V. Bertero and Eduardo Miranda,

(Structures Congress XII, N. C. Baker, ed. and Barry J.

Loodno, ed., 1994), p561-566. Spread Footing Prediction Event at the National Geotechnical Experimentation Site on the Texas A&M Universiy Riverside Campus, David Thomas, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p149-152.

Soil conservation

Agriculture and Soil Conservation, Billy M. Teels, (National Water Resources Regulation: Where is the Envi-ronmental Pendulum Now?, Howard Holme, ed., 1994), p211-218.

Soil consolidation tests

Eccentric Settlements of a Rigid Foundation on a Consoli-dating Layer, Zhongqi Yue and A. P. S. Selvadurai, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p612-627.

Prospects of Vacuum-Assisted Consolidation for Ground Improvement of Coastal and Offshore Fills, S. Thevanayagam, E. Kavazanjian, Jr., A. Jacob and I. Juran, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p90-105.

Soil deformation

Lateral Foundation Deformations for a Marine Test Fill, Demetrious C. Koutsoftas, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1111-1123.

P-Ultimate for Undrained Analysis of Laterally Loaded Piles, James D. Murff and Jed M. Hamilton, GT Jan. 93,

p91-107.

Vertical and Horizontal Deformations for Foundations on Sand: An Experimental Study, Christos N. Marangos, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p179-189.

Soil dynamics

Axisymmetric Time-Domain Transmitting Boundaries, Andrew John Deeks and Mark Felton Randolph, EM Jan. 94, p25-42

Evaluation of Soil Liquefaction by Energy Principles, J. Ludwig Figueroa, Adel S. Saada, Liqun Liang and Nitin M. Dahisaria, GT Sept. 94, p1554-1569.

Extraction of Dynamic Soil Properties Using Extended Kalman Filter, Jeen-Shang Lin, GT Dec. 94, p2100-

Factors Affecting Degradation of Clay Masses, Paul A. Gilbert, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p449-457.

Multiaxial Cyclic Plasticity Model for Clays, Ronaldo I. Borja and Alexander P. Amies, GT June 94, p1051-

Nonlinear Lateral, Rocking, and Torsional Vibration of Rigid Foundations, Ronaldo I. Borja, Wen-Hwa Wu, Al-exander P. Amies and H. Allison Smith, GT Mar. 94, p491-513.

One-Dimensional Shock and Quasi-Static Liquefaction of Silt and Sand, Jane M. Bolton, Deanna S. Durnford and Wayne A. Charlie, GT Oct. 94, p1874-1889

Three-Dimensional Seismic Analysis of La Villita Dam, A.-W. Elgamal, GT Dec. 92, p1937-1958.

Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994, 0-7844-0027-X, 1940pp.

Cover-Subsidence Sinkhole Evaluation of State Road 434, Longwood, Florida, Jon Foshee and Brian Bixler, GT Nov. 94, p2026-2040.

Effects of Air Compression and Counterflow on Infiltration into Soils, M. E. Grismer, M. N. Orang, V. Clausnitzer and K. Kinney, IR July/Aug. 94, p775-795.

Gully Potential in Soil-Covered Uranium Waste Impoundments, Steven R. Abt, Christopher J. Pauley, Scott A. Hogan and Terry L. Johnson, EY Aug. 94, p51-66. Predicting Sediment Yield in Storm-Water Runoff from

Urban Areas, Thomas W. Haster and Wesley P. James, WR Sept./Oct. 94, p630-650.

Soil gas

Gas in Soil I: Detection and η-Profiling, Nader S. Rad and Tom Lunne, GT Apr. 94, p697-715.

Gas in Soils II: Effect of Gas on Undrained Static and Cyclic Strength of Sand, Nader S. Rad, Antonio J. D. Vianna and Toraly Berre, GT Apr. 94, p716-736.

Soil investigations

Compaction of Lunar-Type Soil, Leonhard E. Bernold, AS Apr. 94, p175-187.

Use and Abuse of Settlement Analysis, Ralph B. Peck, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1-7.

Air Entrapment and Water Infiltration in Two-Layered Soil Column, H. Latifi, S. N. Prasad and O. J. Helweg, IR Sept./Oct. 94, p871-891.

For Stronger Soil, Throw in Geosynthetic Fibers, Mix Thoroughly and Build, ET June/July 94, p1,6-7.

Liquefaction-Induced Lateral Spreading of Mildly Sloping Ground, Gregg L. Fiegel and Bruce L. Kutter, GT Dec. 94, p2236-2243.

Sedimentation and Remediation Aspects of Recreation Lakes, Satya Vasireddy, Ashok Medhi and Anand Prakash, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1136-

A Study on Mathematical Model for Sediment Yield in Mountain Regions with Large Hillside Slopes, Duo Fang and Guoliang Yu, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p752-756.

Soil mechanics

Following the Geotechnical Studies of the West-Breakwater at Sines; Hydro-Geotechnical Stability of Breakwater Sines, Proto-Geoteinhar Jack Hagenar, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p124-167.

Micromechanics Modeling for Stress-Strain Behavior of Granular Soils. II: Evaluation, Ching S. Chang, Mohammed G. Kabir and Yang Chang, GT Dec. 92, p1975-

New Perspectives on Soil Creep, Matthew R. Kuhn and James K. Mitchell, GT Mar. 93, p507-524. Reduction of Settlements Using Soil Reinforcement, M. Sherif Abdel-Baki and G. P. Raymond, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p525-537.

Shaft Performance in Taylor Marl-Field Measurements vs. Numerical Modeling, David B. Spires, Fei Duan and Marek Mrugala, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p779-784.

Soil-Structure Interaction During Mining Induced Ground Movements, Guoming Lin, Eric C. Drumm, Richard M. Bennett, Larry Powell and Ted Triplett, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p786-797.

Stresses Induced by Surficial and Deep Loading in Elastic Medium, Olivier Rossa and Gabriel Auvinet, GT Aug.

92, p1241-1246.

Teaching Soil Mechanics Laboratories with Computer Assistance, William Whitaker, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1280-1285

Undrained Shear Strength of Liquefied Sands for Stability Analysis, Timothy D. Stark and Gholamreza Mesri, GT Nov. 92, p1727-1747.

Vertical Uplift Capacity of Horizontal Anchors, Kanaka-pura S. Subba Rao and Jyant Kumar, GT July 94, p1134-1147.

New Modulus of Soil Reaction - E' Values for Buried Thermoplastic Pipe Design, Jey K. Jeyapalan and Peggy A. Jaramillo, (Hydraulies of Pipelines, Deon T. Fowles,

ed. and Douglas H. Wegener, ed., 1994), p239-260.

Seasonal Variation of Resilient Modulus of Subgrade Soils,
Myung S. Jin, K. Wayne Lee and William D. Kovacs, TE

July/Aug. 94, p603-616.

Soil nailing

Wall in Puerto Rico, Suang S. Cheng and Lawrence A. Hansen, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), pl-16.

Soil Nailing Saves Distressed Timber Wall, James Harmston and Gary W. Rhodes, (Serviceability of Earth Re-taining Structures, Richard J. Finno, ed., 1994), p130-

Soil permeability

Air-Permeability Measurement for Soil at Low and High Pressure, Shawn A. Rodeck, Bruce A. DeVantier and Braja M. Das, EE Sept./Oct. 94, p1337-1343.

Cyclic Behavior of Partially Saturated Collapsible Soils Subjected to Water Permeation, Kenji Ishihara and Kenji Harada, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p34-50.

Dispersivity in Heterogeneous Permeable Media, Dwayne A. Chesnut, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Commit-

tee, 1994), p1822-1841.

Modeling Infiltration Into a Tuff Matrix From a Saturated Vertical Fracture, Clifford K. Ho, (High Level Radioactive Waste Management, High Level Radioactive Waste

Program Committee, 1994), p1897-1904.

Some Results from the Second Iteration of Total-System Performance Assessment for Yucca Mountain, Michael L. Wilson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1655-1662.

Studies of Non-Isothermal Flow in Saturated And Partially Saturated Porous Media, Clifford K. Ho, Kevin S. Maki and Robert J. Glass, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p2481-2491.

Soil pollution

Bacterial Density Changes Across Sludge Disposal Facility, Ling Cheng, Bret Buras, D. M. Griffin, Jr. and James

D. Nelson, EE Jan./Feb. 94, p138-153.

Biodegradation of Phenanthrene in Sand Columns in the Presence of Nonionic Surfactants, David Norris and Tariq Ahmed, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p360-367

Constructing Around Contamination, Edward A. Wood, Jill R. Crosbie and Richard A. Brown, CE Oct. 94, p50-

Cracking and Fracture Behavior of Soil, Hsai-Yang Fang, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed.,

mg, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p102-117.
Effects of Molecular Oxygen and pH on the Adsorption of Aniline to Activated Carbon, Peter Fox and Kamalesh Pinisetti, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p617-623.

Fate/Transport Modeling and Remediation of Contaminat ed Plume at Vance Airforce Base, Avdhesh K. Tyagi and Sharon H. Carpenter, (Hydraulic Engineering George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p287-292.

Groundwater Remediation at a Superfund Site, Henry Y. He, Jing-Yea Yang and Gregory Powell, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p282-286.

Heavy Metal Removal from Soil by Coupled Electric-Hydraulic Gradient, Lutful I. Khan and M. Sahidul Alam, EE Nov./Dec. 94, p1524-1543.

How Can a Radioactive Waste Disposal Facility Achieve Compliance with RCRA? Ruth F. Weiner, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1525-1531.

In Situ Treatment of VOCs by Recirculation Technologies, O. F. Webb, R. L. Siegrist, M. R. Ally, W. E. Sanford, P. M. Kearl and J. L. Zutman, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p572-579.

Innovative Treatment of Soil Contamination: Radiolytic Destruction of Dioxin and Co-Contaminants by Cobalt-60, Roger J. Hilarides and Kimberly A. Gray, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p733-736

Joint Optimization of Groundwater Remediation and Monitoring, Peter K. Kitanidis and Sang-II Lee, (Water Poli-cy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p525-528.

A model to describe the fate of agricultural pollutants, A. Pinheiro and B. Caussade, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p170-174.

Monitoring Petroleum Contamination in an Aquifer, Paramesh Anantharaman and Joseph C. Cataldo, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p272-276.

Petroleum Contaminated Soils in Highway Construction, Jay N. Meegoda, A. Samer Ezeldin, David A. Vaccari and Robert T. Mueller, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p904-911.

A Probability Based Approach to the Design and Operation of Soil Vapor Extraction Systems, Kenneth K. Kebbell and William F. McTernan, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p564-571.

Quantification of the Mechanisms Controlling the Removal Rate of Volatile Contaminants by Air Sparging, Gretchen L. Hein, Neil J. Hutzler and John S. Gierke, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p556-563. Remediation of Contaminated Soils by Solvent Flushing,

Denie C. M. Augustijn, Ron E. Jessup, P. Suresh C. Rao

and A. Lynn Wood, EE Jan./Feb. 94, p42-57.

Foundation Uniform Pressure and Soil-Structure Interaction, Rusk Masih, GT Nov. 94, p2064-2071.

Soil properties

Analysis of Deep Excavation in Boston, Andrew J. Whittle, Youssef M. A. Hashash and Robert V. Whitman, GT Jan. 93, p69-90.

Analysis of Port Allen Lock in Elastic-Plastic Soil Medium Hsi Chi Yang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p865-872.

Carbon Formation Theory for Space Oxygen Processes, Peter E. Nolan, Andrew Hall Cutler and David C. Lynch, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1199-1209.

Comparison of Rock Correction Methods for Compaction of Clayey Soils, Sandra L. Houston and Kenneth D. Walsh, GT Apr. 93, p763-778.

Estimating Autocovariance of In-Situ Soil Properties, Don J. DeGroot and Gregory B. Baecher, GT Jan. 93, p147-

Estimating Hydraulic Conductivity of Compacted Clay Liners, Craig H. Benson, Huaming Zhai and Xiaodong

Wang, GT Feb. 94, p366-387. Fiber Optic Chemical Sensors on Mars, M. A. Butler, A. J. Ricco, F. J. Grunthaner and A. L. Lane, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1345-1354

High-Strain Kinetic Testing of Deep Foundations, Alain E. Holeyman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p934-939.
 In-situ Extraction of Lunar Soil Volatiles, Layton J. Wit-

tenberg, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p687-696.

In-Situ Measurements of Dynamic Soil Properties and Liq-uefaction Resistances of Gravelly Soils at Keenleyside Dam, Ken K. Y. Lum and Li Yan, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and

Panos Dakoulas, ed., 1994), p221-240.

Integrated GIS for Construction Site Investigation, Amr R. Oloufa, Ahmed A. Eltahan and C. S. Papacostas, CO Mar. 94, p211-222.

JSC-1: A New Lunar Soil Simulant, David S. McKay, James L. Carter, Walter W. Boles, Carlton C. Allen and Judith H. Allton, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p857-866.

Lunar Oxygen Production - A Maturing Technology, Carlton C. Allen, Gary G. Bond and David S. McKay, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994),

p1157-1166.

Lunar Oxygen Production in a Hydrogen "Cold" Plasma, Daniel E. Bullard, Peter E. Nolan and David C. Lynch, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1188-1198.

Oxygen from Lunar Soil via Fluorination, Wolfgang Seboldt, Stephan Lingner, Stephan Hoernes and Wolfgang Grimmeisen, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1210-1219.

Oxygen Generation from Synthetic Moon Soil Using a Plasma Reactor, P. R. Taylor, S. A. Pirzada, K. A. Pris-Plasma Reactor, F. R. Taylor, S. G. Filzados, Construc-tion, and Operations in Space PV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1178-1187. Reservoir Estimates for the Sulpicius Gallus Region, Bon-

nie Cooper, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p889-896.

A Simple Method of Producing Lunar Soil Simulants for Engineering Studies, Koon Meng Chua, Scott Pringle and Stewart W. Johnson, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p867-877.

Software for Settlement Analysis, John T. Christian, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio,

ed., 1994), p1718-1729.

Spread Footing Settlement Prediction for the National Geotechnical Experimentation Site Prediction Event: Settlement '94, P. Cooksey, Q. Tang, M. Zhao, M. Mauldon and E. Drumm, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p173-176.

State Parameter from Self-Boring Pressuremeter Tests in

Sand, H. S. Yu, GT Dec. 94, p2118-2135.

Terrestrial Analogs: Implications for Lunar Lava Tubes, Cassandra R. Coombs and B. Ray Hawke, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1138A User Friendly Microcomputer Program for Liquefaction Potential Analysis, A. H. Wu, J. S. Hsu and A. Urzua, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p843-848.

Soil samples

JSC-1: A New Lunar Soil Simulant, David S. McKay, James L. Carter, Walter W. Boles, Carlton C. Allen and Judith H. Allton, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p857-866.

Kinetic Interpretations of First Reactivity Experiments on Lunar Basalt Samples, M. A. Gibson, C. W. Knudsen, D. J. Brueneman and H. Kanamori, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1167-1177.

Soil sampling

Characterization of a Desert Soil Sequence at Yucca Mountian, NV, William R. Guertal, Alan L. Flint, Lon L. Hofmann and David B. Hudson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2755-2763.

Collecting Sediment Environmental and Geotechnical Data Using an Impact Core Sampler, James M. Schmidt, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p279-

Lunar ISRU: An Evolutionary Approach, John L. Paterson, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1077-1085.

Soil saturation zones

Quantification of the Mechanisms Controlling the Removal Rate of Volatile Contaminants by Air Sparging, Gretchen L. Hein, Neil J. Hutzler and John S. Gierke, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p556-563.

An Alternative Formulation of Volume-change Behavior of Soils, Sunirmal Banerjee and Kandiah Sribalaskandarajah, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p652-662.

Application of the "Diflupress L.D." Field Test to Settlement Calculation, C. Leidwanger, E. Flavigny, R. Chambon, J. L. Giafferi, P. Catel and G. Bufi, (Vertical and Horizontal Deformations of Foundations and Embank-ments, Albert T. Yeung, ed. and Guy Y. Félio, ed.,

1994), p1312-1324.

Comparison of Predicted and Measured Settlement of a Test Embankment Over Soft Soil, Kuo-Hsia Chang, William D. Kovacs and Ming-Jiun Wu, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1164-1175.

Design and Installation of a New Settlement-Inclinometer Device, R. G. Campanella, R. S. Jackson, J. A. R. Ortigao and C. B. Crawford, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p911-922.

Earthquake-Induced Settlements in Silty Sands for New England Seismicity, Cetin Soydemir, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and

Panos Dakoulas, ed., 1994), p77-90.

Mitigation Measures for Small Structures on Collapsible Alluvial Soils, Kyle M. Rollins and G. Wayne Rogers, GT Sept. 94, p1533-1553.

Performance of Wick Drains Installed by Vibration, Richard P. Long, Leo F. Fontaine and Bruce Olmstead, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1193-1201.

Rate of Settlement of Silt Alluvium at Trojan, Derek H. Cornforth, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1460-1471.

Surface Settlement Due to Shear Stresses at Depth, Madhira R. Madhav and N. Kumar Pitchumani, GT July

94, p1205-1210.

Soil stabilization

Building Performance Founded on an Improved Sand in Recife, Brazil, J. F. T. Jucá, A. O. C. Fonte and I. D. S. Pontes Filho, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1202-1213.

Dynamic Compaction: Two Case Histories Utilizing Innovative Techniques, Albert A. Bayuk and Andrew D. Walker, (In-Situ Deep Soil Improvement, Kyle M. Rol-

lins, ed., 1994), p55-67.

Field Test of Thermal Precompression, Tuncer B. Edil and Patrick J. Fox, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1274-1286.

For Stronger Soil, Throw in Geosynthetic Fibers, Mix Thoroughly and Build, ET June/July 94, p1,6-7.

Jet Grouting Gains, Paul Tarricone, CE Dec. 94, p40-43. New and Innovative Repair Technologies (Soil Stabilization and Pot-Hole Repair/Prevention), William A. Mallow, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1097-1102.

Soil Improvement to Mitigate Settlements under Existing Structures, H. R. Al-Alusi, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1214-1223.

Soil Stabilization Using Oil-Shale Solid Waste, John P. Turner, GT Apr. 94, p646-660.

Torching Soils Increases Strength and Stiffness, CE Apr. 94, p25.

Soil strength

Collecting Sediment Environmental and Geotechnical Data Using an Impact Core Sampler, James M. Schmidt, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p279-

Estimating Sediment Relative Density Using an Impact Core Sampler and Wave Equation-based Pile Analysis, James M. Schmidt and Donald E. Bruggers, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1212-1219.

Evaluation of Laboratory Limerock Bearing Ratio Test on Pavement Soils in Florida, W. Virgil Ping and Zhiliang Yu, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p223-230.

ment Materials for Pavement Design, Herbert F. Southgate and Kamyar C. Mahboub, TE Nov./Dec. 94, p940-952. Proposed Uniform Scale for Stiffness of Unbound Pave-

Soil structure

Collapse Mechanism of Compacted Clayey and Silty Sands, T. A. Alwail, C. L. Ho and R. J. Fragaszy, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1435-1446.

Evaluation of In-Place Wetting Using Soil Suction Measurements, Kenneth D. Walsh, William N. Houston and Sandra L. Houston, GT May 93, p862-873.

Prediction of Movement in Expansive Clays, Robert L. Lytton, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1827-1845.

Stability of Shale Embankments, Tien H. Wu, Brian W. Randolph and Chiung-Shiann Huang, GT Jan. 93,

Soil tests

Addendums to the Prediction Package, Robert Gibbens, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p86-91.

Comparison of Headcut Advance Testing and Soil Test Results, Gregory J. Hanson and Robinson. Kerry M., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p426-430.

Data and Prediction Request for the Spread Footing Prediction Event, Robert Gibbens and Jean-Louis Briaud, (Predicted and Measured Behavior of Five Spread Foot ings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p11-85.

Electrical-Resistivity Measurements for Evaluating Compacted-Soil Liners, R. J. Kalinski and W. E. Kelly, GT Feb. 94, p451-457.

Teaching Soil Mechanics Laboratories with Computer As-

sistance, William Whitaker, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1280-1285.

Soil treatment

In Situ Treatment of VOCs by Recirculation Technologies, O. F. Webb, R. L. Siegrist, M. R. Ally, W. E. Sanford, P. M. Kearl and J. L. Zutman, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p572-579.

In-Situ Treatment of Hazardous Sediment, Lyman Wible, Stacy McAnulty, Robert Stanforth, Ajit Chowdhury and Mick Warner, (*Dredging '94*, E. Clark McNair, Jr., ed.,

1994), p468-473.

Innovative Treatment of Soil Contamination: Radiolytic Destruction of Dioxin and Co-Contaminants by Cobalt-60, Roger J. Hilarides and Kimberly A. Gray, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p733-736.

Mitigation Measures for Small Structures on Collapsible Alluvial Soils, Kyle M. Rollins and G. Wayne Rogers,

GT Sept. 94, p1533-1553

Optimal Operation of Soil Aquifer Treatment System Zongwu Tang and Larry W. Mays, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p441-444. A Probability Based Approach to the Design and Operation

of Soil Vapor Extraction Systems, Kenneth K. Kebbell and William F. McTernan, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p564-571.

Risk Variability from Uniform Soil Remediation Goals for PCBs, Paula A. Labieniec, David A. Dzombak and Robert L. Siegrist, EE May/June 94, p495-512.

Treatment of Tetrachloroethylene with Anaerobic Attached Film Process, K. H. Chu and W. J. Jewell, EE Jan./Feb. 94, p58-71.

Conservative Characteristics-Based Schemes for Mass Transport, C. W. Li and T. S. Yu, HY Sept. 94, p1089-

Green-Ampt Analysis of Wetting Patterns for Surface Emitters, Shu-Tung Chu, IR Mar./Apr. 94, p414-421.

Irrigation Timing for Wheat Based on Climate, Crop, and Soil Data, R. P. Tripathi, IR May/June 92, p370-381. Nutrient Leaching from Alfalfa Irrigated with Municipal Wastewater, Scott F. Korom and Roland W. Jeppson, EE Sept./Oct. 94, p1067-1081.
Partitioning of Evapotranspiration Using Lysimeter and

Micro Bowen-Ratio Systems, Hossein Ashktorab, W. O. Pruitt and K. T. Paw U, IR Mar/Apr. 94, p450-464. Penetration Resistance Value along Compaction Curves, Alain G. Faure and José D. Viana Da Mata, GT Jan. 94, p46-59.

Precision of Evapotranspiration Estimates Using Neutron Probe, Osmar A. Carrijo and Richard H. Cuenca, IR Nov./Dec. 92, p943-953.

Soil water movement

Case Study of Debris Flow, Robert W. Day, CF Aug. 94, p192-200.

Honolulu Project's Soil-mix Cutoff Wall is a U.S. First, CE Jan. 94, p90.

Optimum Operation of Recharge Basins, Hasan Mushtaq, Larry W. Mays and Kevin E. Lansey, WR Nov./Dec. 94, p927-943

Prediction of Movement in Expansive Clays, Robert L. Lytton, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1827-1845.

Soil water storage

Soil Water Model for Evaluating Water Delivery Flexibility, Sophie Lamacq and Wesley W. Wallender, IR July/Aug. 94, p756-774.

Soil, shear strength

Strip Drains in Dredged Material Placement Areas, Timo-thy D. Stark and Jack Fowler, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p420-429.

Soil-pile interaction

Laterally Loaded Piles in Elastic Media, Keming Sun, GT

Aug. 94, p1324-1344.

Nonlinear Model for Dynamic Axial Pile Response,
Mohamed H. El Naggar and Milos Novak, GT Feb. 94,

P-Ultimate for Undrained Analysis of Laterally Loaded Piles, James D. Murff and Jed M. Hamilton, GT Jan. 93,

P-y Analysis of Laterally Loaded Piles in Clay Using DMT, M. A. Gabr, T. Lunne and J. J. Powell, GT May 94, p816-837.

Soil-pipe interaction

Basics of Flexible Pipe Structural Design, R. C. Prevost and K. K. Kienow, TE July/Aug. 94, p652-671.

Evaluation of Shotcrete Efficiency in Sewers Rehabilita-tion, Youssef Georges Diab, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p928-935.

Pipe Uplift Resistance in Frozen Soil and Comparison with Measurements, A. Foriero and B. Ladanyi, CR Sept. 94,

Soil-structure interaction

Analysis of Embedded Foundations by Substructure-Deletion Method, R. Betti and A. M. Abdel-Ghaffar, EM June 94, p1283-1303.

Analysis of Port Allen Lock in Elastic-Plastic Soil Medium Hsi Chi Yang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p865-872.

Building Performance Founded on an Improved Sand in Recife, Brazil, J. F. T. Jucá, A. O. C. Fonte and I. D. S. Pontes Filho, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1202-1213.

Computing Response of Tanks with Two Liquids, Yu Tang, ST Dec. 94, p3668-3674.

Cone Models for Embedded Foundation, Jethro W. Meek and John P. Wolf, GT Jan. 94, p60-80.

Design of Mat Foundation for Egg Shape Digesters, S. S. Ibrahim and M. R. Graves, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p13-18.

Discrete Modeling of Soil-Structure Interaction Under Dynamic Loading, Grzegorz Bak, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p873-876.

Dynamic Green's Functions of Homogeneous Poroelastic Half-Plane, T. Senjuntichai and R. K. N. D. Rajapakse, EM Nov. 94, p2381-2404.

Dynamic Modeling and Response of Soil-Wall Systems, Anestis S. Veletsos and Adel H. Younan, GT Dec. 94,

p2155-2179.

Dynamics of Nuclear Power Plant Structures with Foundation Interaction, Samir J. Serhan, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994),

Effect of Flexibility on Impedance Functions for Circular Foundation, Gin-Show Liou and Pao-Han Huang, EM July 94, p1429-1446

Explicit Stresses under Rectangular Footings, R. Irles and F. Irles, GT Feb. 94, p444-450.

Foundation Uniform Pressure and Soil-Structure Interac-tion, Rusk Masih, GT Nov. 94, p2064-2071.

Multiaxial Cyclic Plasticity Model for Clays, Ronaldo I. Borja and Alexander P. Amies, GT June 94, p1051-

Nonlinear Lateral, Rocking, and Torsional Vibration of Rigid Foundations, Ronaldo I. Borja, Wen-Hwa Wu, Al-exander P. Amies and H. Allison Smith, GT Mar. 94, p491-513.

Nonlinear Model for Building-Soil Systems, D. B. McCallen and K. M. Romstad, EM May 94, p1129-1152.

An Overview of the Analysis and Design Techniques Used on the Main Tunnels of the SSC, Steven H. Baldauf, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1967-1974.

The Performance and Behaviour of Biological Filter Walls as Affected by Cyclical Temperature Changes, George L. England, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p57-76. Prediction of Observed Bridge Response with Soil-Pile-Structure Interaction, N. Makris, D. Badoni, E. Delis and G. Gazetas, ST Oct. 94, p2992-3011.

Response Study of a Flexible Building Using Three Earthquake Records, M. Çelebi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1220-1225

Seismic Analysis of Reinforced Concrete Building Using Finite-element Techniques, Tom Panayotido and Jayant Vir, (Computing in Civil Er Khozeimeh, ed., 1994), p1091-1098. in Civil Engineering,

Seismic Evaluation of the Tied-arch Bridge Across the Mississippi River on I-40, W. David Liu, Roy A. Imbsen, Richard J. LeBeau, Farid S. Nobari and Lelio H. Mejia, (*Structures Congress XII*). No. C. Baker, ed. and Barry J. Loodno, ed., 1994), p355-360.

Soil Improvement to Mitigate Settlements under Existing Structures, H. R. Al-Alusi, (Vertical and Horizontal De formations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1214-1223.

Soil-Structure Interaction During Mining Induced Ground Movements, Guoming Lin, Eric C. Drumm, Richard M. Bennett, Larry Powell and Ted Triplett, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994; 2015. 1994), p786-797.

Three Dimensional Simulation of Progressive Tunneling Process for Lining Design of Intersecting Tunnels in Soft Rock, Liqiu (Lichu) Guan, Steven H. Baldauf and Wern-Ping (Nick) Chen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2006-2013.

Vibration of Foundations on Incompressible Soils with No Elastic Region, Ronaldo I. Borja and Wen-Hwa Wu, GT Sept. 94, p1570-1592.

1988 Armenia Earthquake. II: Damage Statistics Versus Geologic and Soil Profiles, M. K. Yegian, V. G. Ghahra-man and G. Gazetas, GT Jan. 94, p21-45.

1993 Ground-Water Flooding in the Havana Area, Adrian P. Visocky, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p608-612

Air Entrapment and Water Infiltration in Two-Layered Soil Column, H. Latifi, S. N. Prasad and O. J. Helweg, IR Sept./Oct. 94, p871-891.

Application of Fracture Mechanics to Soils: An Overview, Luis E. Vallejo, (Fracture Mechanics Applied to Geo-technical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p1-20.

Automated Surface Wave Method: Inversion Technique, Deren Yuan and Soheil Nazarian, GT July 93, p1112-

Bearing Capacity of Soils, U.S. Army Corps of Engineers, Department of the Army, 1993, 0-87262-997-X, 145pp.

Becker Test Results from Gravel Liquefaction Sites, Leslie F. Harder, Jr., (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p201-220.

Behavior of Gravelly Soils During Seismic Conditions -An Overview, M. E. Hynes, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p117-120.

Bug-Based Process Ready to Take Toxics Out of Incinerator Ash and Soil, ET Aug./Sept. 94, p1,6.

Building A Barrier Wall Through Boulders, Donald R. McMahon, Michael J. Mann and Robert C. Tulett, CE Oct. 94, p60-62.

Change in Gasoline Constituent Mass Transfer During Soil Venting, Nancy J. Hayden, Thomas C. Voice, Michael D. Annable and Roger B. Wallace, EE Nov./Dec. 94, p1598-1614.

Compaction of Lunar-Type Soil, Leonhard E. Bernold, AS Apr. 94, p175-187.

Cyclic Behavior of Gravelly Soil, Mark D. Evans and Shengping Zhou, (Ground Failures Under Seismic Con-ditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p158-176.

Cyclic Threshold Shear Strains in Soils, Mladen Vucetic, GT Dec. 94, p2208-2228.

A Deep Soil Mix Cutoff Wall at Lockington Dam, Ohio, Andrew D. Walker, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p133-145. Deformations in Granular Soils Due to Cyclic Loading, P.

M. Byrne and J. McIntyre, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1864-1896.

Effects of Air Compression and Counterflow on Infiltration into Soils, M. E. Grismer, M. N. Orang, V. Clausnitzer and K. Kinney, IR July/Aug. 94, p775-795. Experimental Data and Modeling for Surfactant Micelles,

HOCs, and Soil, David A. Edwards, Zhongbao Liu and Richard G. Luthy, EE Jan./Feb. 94, p23-41.

Fracture Mechanics Applied to Geotechnical Engineering, Geotechnical Special Publication No. 43, Luis E. Valle jo, ed. and Robert Y. Liang, ed., 1994, 0-7844-0056-3, 165pp.

Furrow Advance-Rate Solution for Stochastic Infiltration Properties, D. Renault and W. W. Wallender, IR May/

June 94, p617-633.

Gravelly Soil Properties Evaluation by Large Scale In-Situ Cyclic Shear Tests, Takaaki Konno, Munenori Hatana-ka, Kenji Ishihara, Yukimi Ibe and Setsuo Iizuka, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p177-200.

Ground-Penetrating Radar For Salt-Affected Soil Assessment, Sun F. Shih and Don L. Myhre, IR Mar./Apr. 94,

p322-333

Heat Transfer Modeling in Burial Sites Containing Heat-Generating Waste, Mohamed Alsharif, Iqbal Ahmed and Paul Dickman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p899-906.

Honolulu Project's Soil-mix Cutoff Wall is a U.S. First, CE

Jan. 94, p90.

Influence of Geotextiles on Performance of Saline Sebkha Soils, Sahel N. Abduljauwad, Fouad Bayomy, Abdul-Karim M. Al-Shaikh and Omar S. Baghabra Al-Amoudi, GT Nov. 94, p1939-1960. Mechanical Properties of Kaolinite/Fiber Soil Composite,

M. H. Maher and Y. C. Ho, GT Aug. 94, p1381-1393. Model Studies of Effects on Lunar Soil of Chemical Explosions, Chaun-Ping Lin, Deborah J. Goodings, Leonhard E. Bernold, Richard D. Dick and William L. Fourney,

GT Oct. 94, p1684-1703. Modified Oedometer for Arid, Saline Soils, Omar Saeed Baghabra Al-Amoudi and Sahel N. Abduljauwad, GT

Oct. 94, p1892-1897.

Numerical Simulations of Monotonic and Cyclic Loading of Granular Soil, Tang-Tat Ng and Ricardo Dobry, GT

Feb. 94, p388-403.

Observations on the Growth of an Internal Boundary Layer with a Lidar Technique, Chia R. Chu, Marc Parlange, William Eichinger and Gabriel Katul, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p519-529.

Pneumatic Conveying of Materials at Partial Gravity, Thomas A. Sullivan, Elissa Koenig, Christian W. Knudsen and Michael A. Gibson, AS Apr. 94, p199-208.

Seismic Bearing Capacity and Settlements of Foundations, R. Richards, Jr., D. G. Elms and M. Budhu, GT Apr. 93, p662-674.

Seismic Liquefaction Potential Assessed by Neural Net-works, Anthony T. C. Goh, GT Sept. 94, p1467-1480.

Soil Mix Walls in Difficult Ground, David S. Yang and Shigeru Takeshima, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p106-120.

oil Washing and Biotreatment of Petroleum-Contaminated Soils, Alok Bhandari, Dennis C. Dove and John T. Novak, EE Sept./Oct. 94, p1151-1169.

A Study of Alkalinity Leaching and Residual Strength of Alkaline Stabilized Sludge, Andrew P. Kruzic and Thomas M. Petry, (Critical Issues in Water and Waste-water Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p129-136.

Surfactant Solubilization of Organic Compounds in Soil/ Aqueous Systems, David A. Edwards, Zhongbao Liu and Richard G. Luthy, EE Jan./Feb. 94, p5-22.

Torching Soils Increases Strength and Stiffness, CE Apr. 94, p25.

Vibratory Extraction of Clay Fines from Subsurface, Lakshmi N. Reddi, A. Hadim, R. N. Prabhushankar and F. Shah, EE Nov./Dec. 94, p1544-1558.

Soils, saturated

Cyclic Behavior of Partially Saturated Collapsible Soils Subjected to Water Permeation, Kenji Ishihara and Kenji Harada, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994),

Dynamic Compaction of Saturated Silt and Silty Sand - A Case History, Jean C. Dumas, Nelson F. Beaton and Jean-François Morel, (In-Situ Deep Soil Improvement,

Kyle M. Rollins, ed., 1994), p80-89.

Dynamic Lateral Pressures Due to Saturated Backfills on Rigid Walls, Isao Ishibashi, Makoto Osada and Tatsuo

Uwabe, GT Oct. 94, p1747-1767.

Fracture Mechanics and Plasticity in Saturated Clay, Adel S. Saada, Liqun Liang and Gary F. Bianchini, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p21-39.

Influence of Geotextiles on Performance of Saline Sebkha Soils, Sahel N. Abduljauwad, Fouad Bayomy, Abdul-Karim M. Al-Shaikh and Omar S. Baghabra Al-Amoudi,

GT Nov. 94, p1939-1960.

Vibratory Mobilization of Immiscible Liquid Ganglia in Sands, Lakshmi N. Reddi and Sreedhar Challa, EE Sept./Oct. 94, p1170-1190.

oils, unsaturated

Buoyant Advection of Gases in Unsaturated Soil, Gregory E. Seely, Ronald W. Falta and James R. Hunt, EE Sept./ Oct. 94, p1230-1247

Evaluation of In-Place Wetting Using Soil Suction Measurements, Kenneth D. Walsh, William N. Houston and Sandra L. Houston, GT May 93, p862-873.

Shear Modulus of Kaolin Containing Methane Bubbles, S. M. Duffy, S. J. Wheeler and J. D. Bennell, GT May 94, p781-796.

Solar collectors

Tension Element to Reduce Loads in Rim Support of Inflatable Reflector, Gershon Grossman, AS Apr. 94, p129-142.

Solar energy

Breakout Session 6C: Alternative Fuels, Ovi Colavincenzo, Gerald Esper and Peter Hagerty, (Transportation Plan-ning and Air Quality II, Thomas F. Wholly, ed., 1994), p164-166.

A Conceptual Study of A Solar Power Satellite Using Centrifugal Force, Hiroshi Yamakawa, Hiroshi Kanamori, Kenji Nozaki, Takeo Oura, Takanori Sato, Hisahito Tadokoro, Kenji Takagi, Hiroshi Ueno, Koji Oishi, Haruyuki Namba and Shinji Matsumoto, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p57-63.

Construction of Large Lunar Structures by Fusion Welding of Sintered Regolith, R. S. Crockett, B. D. Fabes, T. Nakamura and C. L. Senior, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1116-1127.

Helium-3 on the Moon: Model Assumptions and Abundances, Lawrence A. Taylor, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p678-686.

New Solar Heating System, ET Oct./Nov. 94, p11.

Optical Waveguide Solar Energy System for Lunar Material Processing, Takashi Nakamura, Constance L. Senior, James M. Shoji and Robert D. Waldron, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1266-

Propulsion Systems for Future Space Exploration, Michael B. Delclos, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p765-768.

Solar Energy Soars, ET June/July 94, p10-11.

Solar Stretch, Jörg Schlaich, Rudolf Bergermann and Wolfgang Schiel, CE May 94, p47-50.

Solar power generation Solar Energy Soars, ET June/July 94, p10-11.

Solar Power Satellites, Sean Russell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p793-798.

Solar radiation

Engineering Implications of Levitating Lunar Dust, Frederick A. Slane, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley

Lokaj, ed., 1994), p1097-1105. Inter-stellar Propulsion: The Need for Speed, William R. Claycomb, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p737-746.

The Levitation of Lunar Dust Via Electrostatic Forces, S. Doe, J. O. Burns, D. Pettit, J. Blacic and P. W. Keaton, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p907-915.

A Practical Application of Concession Schemes to Space Energy Projects, Michel Lyonnet du Moutier, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p658-

667.

Roles of the Lunar-Solar Power System In Development of the Resources of Greater Earth for Mankind, David R. Criswell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p638-647.

Solid waste disposal Numerical Modeling of Salt Transport at a Solid Waste Disposal Site Capped With Coastal Dredged Material, Ram Krishnamohan, John B. Herbich and Fred S. Williams, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1152-1161.

State Regulation of Upland Disposal of Dredged Material in Michigan, Frank Snitz, Douglas Zande and Pamela Horner, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994),

Solid waste management

Computer-Based Advisors for Environmentally Conscious "Green" Product Design, Antonio Diaz-Calderon, Steven Fenves, James Garrett and Chris Hendrickson, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1497-1504.

Geosynthetics Conquer the Landfill Law, Luther Derian, Edward Kavazanjian, Jr., Michael S. Snow and Kelly M.

Gharios, CE Dec. 93, p50-53.

Grey Dynamic Programming for Waste-Management Planning under Uncertainty, Guo H. Huang, Brian W. Baetz and Gilles G. Patry, UP Sept. 94, p132-156.

Not Just Wallowing in the Mire, CE Aug. 94, p8. Pipes, Not Penetrations, Keep Leachate Moving, CE June

94, p19.

Source Evaluation of Solid Waste in Building Construc-tion, Rafael M. Gavilan and Leonhard E. Bernold, CO Sept. 94, p536-552.

Taking Trash Out of Hiding, Keith R. Connor, R. Chris Brockway and Bruce E. Henning, CE Feb. 94, p40-43.

Advanced Coal Conversion Solid Wastes: Waste-Management Implications, Charles J. Moretti, EY Apr. 94, p1-16.

Design Optimization of Coventry Municipal Solid Waste Incinerator, V. Nasserzadeh, J. Swithenbank, C. Schofield, D. W. Scott, A. Loader and A. Leonard, EE Nov./Dec. 94, p1615-1629.

Evaluating the Use of Waste Materials in Hot Mix Asphalt, Dale S. Decker, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1042-

Heuristic Algorithm to Locate Solid-Waste Disposal Site, Narayanaswamy V. Ramu and William J. Kennedy, UP Mar. 94, p14-21.

Hydraulic Conditions Required to Move Unanchored Residue Materials, J. E. Gilley, E. R. Kottwitz and G. A. Wieman, IR May/June 94, p591-606.

Optimal Land Allocation for Solid- and Hazardous-Waste Landfill Siting, S. Diane Minor and Timothy L. Jacobs, EE Sept./Oct. 94, p1095-1108.

Recycling Rate May Have Peaked, CE Dec. 94, p8.

Settlement Evaluation for Cap Closure Performance, Edward M. Zamiskie, M. Golam Kabir and Andre Haddad, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p462-475.

Soil Stabilization Using Oil-Shale Solid Waste, John P. Turner, GT Apr. 94, p646-660.

Source Evaluation of Solid Waste in Building Construc-tion, Rafael M. Gavilan and Leonhard E. Bernold, CO Sept. 94, p536-552.

The Use of Recyclable Waste Materials in Hot Mix Asphalt Concrete Highway Pavements, Stanley K. Ciesielski, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p327-335.

Utilization of Waste Materials in Highway Construction, Serji Amirkhanian and David Manugian, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p919-927.

Solidification

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Advanced Concepts in Cement Solidification and Stabiliza-tion Technology, D. L. Cocke, M. Y. A. Mollah, T. R. Hess and R. K. Vempati, (Advances in Cement and Con-crete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p614-615.

Characterization and Use of Fluidized-Bed-Combustion Coal Ash, Christina B. Behr-Andres and Neil J. Hutzler,

EE Nov./Dec. 94, p1488-1506.

Extended Set Control of Concrete, Emmanuel K. Attiogbe and Hamid Farzam, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p137-146.

Immobilization of Heavy Metals in Cementitious Matrix, J. Tritthart, F. D. Tamas, M. Patkai-Horvath and E. Zinterl, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p614.

Leaching from Cementitious Waste forms in Belowground Vaults, John C. Walton, EE Nov./Dec. 94, p1507-1523.

Mechanics of Growing Deformable Solids: A Review, Vyacheslav E. Naumov, EM Feb. 94, p207-220.

Characteristics of Solitary Wave Breaking Induced by Breakwaters, Stéphan T. Grilli, Miguel A. Losada and Francisco Martin, WW Jan./Feb. 94, p74-92.

The Daytona Beach "Large Wave" Event of 3 July 1992, Robert J. Thieke, Robert G. Dean and Andrew W. Garcia, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p45-

Kinematics of Wave Overtopping on Marine Structure, J. J. Lee, F. Zhuang and C. Chang, (Ocean Wave Measure-ment and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p821-834.

Shoaling of Solitary Waves on Plane Beaches, S. T. Grilli, R. Subramanya, I. A. Svendsen and J. Veeramony, WW

Nov./Dec. 94, p609-628.

Surf-Similarity Parameter for Breaking Solitary-Wave Runup, Nobuhisa Kobayashi and Entin A. Karjadi, WW Nov./Dec. 94, p645-650.

Effect of Alkalinity on Copper Corrosion, Travis E. Meyer and Marc Edwards, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p9-16.

Effects of Temperature and pH on Residual Aluminum in Alkaline-Treated Waters, John E. Van Benschoten, James N. Jensen and Md. A. Rahman, EE May/June 94,

Experimental Data and Modeling for Surfactant Micelles, HOCs, and Soil, David A. Edwards, Zhongbao Liu and Richard G. Luthy, EE Jan./Feb. 94, p23-41.

Modeling Issues of Copper Solubility in Drinking Water, Michael R. Schock, Darren A. Lytle and Jonathan A. Clement, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p17-25.

Radionuclides Migration in Fractured Porous Rock: Analytical Solutions for Various Boundary Conditions, Shih-Hai Li and Shean-Lang Chiou, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p1344-1349.

Surfactant Solubilization of Organic Compounds in Soil/ Aqueous Systems, David A. Edwards, Zhongbao Liu and Richard G. Luthy, EE Jan./Feb. 94, p5-22.

Bromide Transport under Sprinkler and Ponded Irrigation, M. Hamdi, D. Durnford and J. Loftis, IR Nov./Dec. 94,

Computation of Transverse Mixing In Streams, Alexander C. Demetracopoulos, EE May/June 94, p699-706.

How Should the Migration and Retardation of Colloids be Characterized? Peter Grindrod, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2709-2718.

Modeling Heavy Metal (Cadmium) Uptake by Soil-Plant Root System, Sandhya Rao and Shashi Mathur, IR Jan./

Feb. 94, p89-96.

A Physically Based Conceptual Model for Simulating Contaminant Levels in Subsurface Water, Miguel A. Mejia, Mohamed M. Hantush and Miguel A. Mariño, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p355-358

Predictability and Sensitivity of Groundwater Transport Models, Hector R. Fuentes and Vassilios A. Tsihrintzis, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p267-271.

Determining Plutonium Concentration in Solution Using a Germanium Crystal and a New L X-Ray/y-Ray Spectro-graphic Method, Raymond C. Gatti, Heino Nitsche, Scott A. Carpenter, Kevin E. Roberts, Becraft Kevin A. and Traudel G. Prussin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2719-2729.

Protecção Provisória do Molhe Oeste do Porto de Sines, Fausto Gonçalves Henriques and Ismael Byscaia de Carvalho, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of

ASCE, 1994), p35-53.

Sensitivity Analysis of Reliability-Based Optimal Solution,

Ib Enevoldsen, EM Jan. 94, p198-205.

Temporary Protection of the West Breakwater of the Port of Sines, Fausto Goncalves Henriques and Ismael Byscaia de Carvalho, (Reconstruction of the West Breakwa-ter at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p54-69.

Dissolution of TCE and TCA Pools in Saturated Subsurface Systems, Albert E. Pearce, Evangelos A. Voudrias and Michael P. Whelan, EE Sept./Oct. 94, p1191-1206. Remediation of Contaminated Soils by Solvent Flushing,

Denie C. M. Augustijn, Ron E. Jessup, P. Suresh C. Rao and A. Lynn Wood, EE Jan./Feb. 94, p42-57.

Waste Generation and Minimization in Semiconductor Industry, David G. Gilles and Raymond C. Loehr, EE Jan./Feb. 94, p72-86.

Integrated Acoustic Seafloor Characterization, Peggy Murray, Ed DeAngelo, Jeff Parker and Thomas J. Fredette, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p295-303

Low-Cost Bridge Scour Measurements, J. D. Schall, J. R. Richardson and G. R. Price, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p114-118.

Biofilm Sorption of Natural Organic Material, Gary Carlson and JoAnn Silverstein, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p460-466.

Comprehensive Fate Model for Metals in Municipal Wastewater Treatment, Wayne J. Parker, Hugh D. Monteith, John P. Bell, Henryk Melcer and P. Mac Berthouex, EE Sept./Oct. 94, p1266-1283.

Berthouex, EE SEPLICAL 34, p1200-1203.
Contaminant Fate and Transport Model in Pool-and-Riffle Streams, Il Won Seo, Dae Young Yu and Jae-Hyung Lee, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p165-169.

Experimental Data and Modeling for Surfactant Micelles, HOCs, and Soil, David A. Edwards, Zhongbao Liu and Richard G. Luthy, EE Jan./Feb. 94, p23-41

Geoscientific Studies in the Tono Area, Japan, T. Nohara, T. Tsuboya, M. Yamakawa, H. Sakuma and Y. Yusa, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2243-2250.

Hydrologic Property Alterations Due to Elevated Temperatures at Yucca Mountain, A. L. Flint, M. H. Nash and M. S. Nash, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p2101-2105.

Influence of Surface Finish on Sorptivity on Concrete, W. J. McCarter, MT Feb. 93, p130-136.

The Role of Fracture Coatings on Water Imbibition Into Unsaturated Tuff, Vijay S. Chekuri, Scott W. Tyler and John W. Fordham, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1891-1896.

Sensitivity of Radiological Impacts of a Waste Disposal System to Radionuclide Sorption in the Geosphere, T. W. Melnyk, J. McMurry and F. P. Sargent, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1222-1228

Surfactant Solubilization of Organic Compounds in Soil/ Aqueous Systems, David A. Edwards, Zhongbao Liu and Richard G. Luthy, EE Jan./Feb. 94, p5-22.

Hydraulics and Sediment Transport Processes in a Pool-Riffle Rocky Mountain Stream, Douglas M. Thompson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p849.

Vertical Sorting Within Dune Structure, Mohamed Abdel-Motaleb, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A.

Pugh, ed., 1994), p139-148.

Source-Receptor Modeling of PAHs Using Deposition Levels in Winter-Long Urban Snowpack, M. Sharma, E. McBean, N. Thomson and J. Marsalek, EE Sept./Oct. 94, p1248-1265.

South Africa

Dredging of Fishing Harbour, Walvis Bay, Keith Mackie, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1037-

Law Enters Agreement with South African Firm, WP Spe-cial issue 94, p5.

South America ASCE President Leads Visit to South American Countries, NE July 94, p16.

South Carolina

South Carolina
Evaluation of Dynamic Compaction of Low Level Waste
Burial Trenches Containing B-25 Boxes, Scott R.
McMullin, (In-Situ Deep Soil Improvement, Kyle M.
Rollins, ed., 1994), p44-54.
Plans for Managing High Level Waste at the Savannah
River Site, N. A. Sheikh and S. R. Salaymeh, (High
Level Bedicartis, Waster Management, High Level Pea

Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1037-

1047

Seismic Parameters from Liquefaction Evidence, James R. Martin and G. Wayne Clough, GT Aug. 94, p1345-1361. State Requires More Than Technology Degree, CE Oct. 94, p27.

Sozen, Mete A.

ASCE Elevates 13 of Its Own to Honorary Membership, NE May 94, p3.

Sozen, Mete Avni

Atlanta Ceremony Celebrates 13 New Honorary Members of ASCE, NE Dec. 94, p2-3.

Space colonies

Adaptive Space Station Technologies and Systems for a Lunar Surface Return Mission, Larry Toups and Sam Ximenes, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p483-493.

Alternative Habitat Concepts for the First Lunar Outpost, Kriss Kennedy and Michael Roberts, (Engineering, Con-struction, and Operations in Space IV, Rodney G. Gal-loway, ed. and Stanley Lokaj, ed., 1994), p1020-1035.

Analysis of Glass-Ceramic Production from Lunar Resources, W. H. Poisl, B. D. Fabes, D. Allen, S. Hawley and A. Carpenter, (Engineering, Construction, and Op-erations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1278-1287.

Atmospheric Pressure within Lunar Structure, Paul S. Nowak, Jeffrey Janakus and Charles E. Mitchell, AS Oct.

94, p398-410.

Biosphere II - Its Effects on Space Colonization, Chris Cassidy, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj,

ed., 1994), p826-832.

Braced Double Skinned Structure in Lunar Application, Hamid R. Adib-Jahromi, Ramesh B. Malla and Michael A. Accorsi, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p47-56.

Carbon Formation Theory for Space Oxygen Processes, Peter E. Nolan, Andrew Hall Cutler and David C. Lynch, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1199-1209.

The Challenge of Mining He-3 on the Lunar Surface: How All the Parts Fit Together, Igor N. Sviatoslavsky, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p668-677.

Construction of a Lunar Base, Dave Torres, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p799-803.

Construction of Large Lunar Structures by Fusion Welding of Sintered Regolith, R. S. Crockett, B. D. Fabes, T. Nakamura and C. L. Senior, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1116-1127.

Damage Tolerance of Thin Composite Reinforced Membrane Structures, Levon Minnetyan, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p296-305.

Design and Construction of Shielded Lunar Outpost, S. D. Jolly, J. Happel and S. Sture, AS Oct. 94, p417-434

Design Criteria for Lunar Construction Equipment, John V. Gies, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1237-1255.

Design Techniques for Rectangular Lunar Modules, Mark E. Schroeder, Philip J. Richter and Jim Day, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p176-185

Development of a Partial Gravity Lunar Airlock, David John Gutierrez, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p227-236.

A Discussion of Nuclear Propulsion in Space Travel, Jeff Mitchell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p756-760.

Distributional Information for Ejection Fragments, Eric P. Steinberg, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley

Lokaj, ed., 1994), p402-413.

Dust Levitation on the Moon, Frederick A. Slane, Nebojsa Duric and Jack O. Burns, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p897-906.

Engineering, Construction, and Operations in Space IV, 2 vols, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994, 0-87262-937-6, 1560pp.

Feasibility of Treating Synthetic Greywater by Culturing Waldmann's Dark Green Lettuce in a Hydroponic Sys-tem, Ricardo B. Jacquez and Michael Montoya, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1256-1265.

Fiber Optic Chemical Sensors on Mars, M. A. Butler, A. J. Ricco, F. J. Grunthaner and A. L. Lane, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1345-

1354

618

1334: Toundation Slab for Lunar Base Construction, Mikiya Okumura, Yasuhiro Ohashi, Takao Ueno, Shojiro Motoyui and Kiosuke Murakawa, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1128-1137.
A Generic Inflatable Structure, for a Lungr/Martina Base

A Generic Inflatable Structure for a Lunar/Martian Base, Willy Z. Sadeh and Marvin E. Criswell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1146-1156

Habitat Configuration Evaluation Criteria for Moon/Mars, Kriss J. Kennedy, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p979-987.

Is It Possible to Colonize Mars? Jonathan Hurley and Steve Garcia, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p782-786.

ed., 1994), p/82-780.
Kinetic Interpretations of First Reactivity Experiments on Lunar Basalt Samples, M. A. Gibson, C. W. Knudsen, D. J. Brueneman and H. Kanamori, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1167-1177.
Living in Space, Michael Wifall, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p842-845.
Logistics Carriers for the First Lunar Outpost Thomas M.

Logistics Carriers for the First Lunar Outpost, Thomas M.

Logistics Carriers for the First Lunar Outpost, Thomas M. Polette, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1046-1058. Lunar Base Aspects for Biotechnology Industry, Judith Fielder and Nickolaus Leggett, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1230-1236. Lunar Base Construction Using the Reinforce Earth Method with Geotextile, Mikiya Okumura, Yasuhiro Ohashi, Takao Ueno, Shojiro Motoyui and Kiosuke Murakawa, (Engineering, Construction, and Operations in Space (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1106-1115.

Lunar ISRU: An Evolutionary Approach, John L. Paterson, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed.,

1994), p1077-1085.

Lunar Mining, Carrie Barkhurst, (Engineering, Construc-tion, and Operations in Space IV, Rodney G. Galloway,

non, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p811-814. Lunar Oxygen Production in a Hydrogen "Cold" Plasma, Daniel E. Bullard, Peter E. Nolan and David C. Lynch, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1188-1198.

Mars Terraformation Revisited, Joseph Guarascio, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p774-781.

A Membrane Structure for a Lunar Assembly Building, Mark E. Schroeder and Philip J. Richter, (Engineering, Construction, and Operations in Space IV, Rodney C Galloway, ed. and Stanley Lokaj, ed., 1994), p186-195.

Methodology for Comparing Lunar Settlement Designs, keith Trivelpiece, (Engineering, Construction, and Op-erations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p969-978.

Mineral Liberation and Beneficiation of Lunar High-Ti interal Liberation and Beneficiation of Lunar High-Ti Mare Basalt, 71055: Digital-Imaging Analyses, John G. Chambers, Lawrence A. Taylor, Allan Patchen and David S. McKay, *Engineering, Construction, and Oper-ations in Space IV*, Rodney G. Galloway, ed. and Stan-ley Lokaj, ed., 1994), p878-888. A Near-Term, Long-Duration, Lunar Outpost Design, S. Sture, S. D. Jolly and J. Happel, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p237-246.

A New Airlock Approach for Human Exploration, Stephen Capps, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p206-216.

Onboard Image Processing With Transputers, András Balázs, József Biró and Sándor Szalai, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1323-

Optical Waveguide Solar Energy System for Lunar Material Processing, Takashi Nakamura, Constance L. Senior, James M. Shoji and Robert D. Waldron, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1266-

Oxygen from Lunar Soil via Fluorination, Wolfgang Seboldt, Stephan Lingner, Stephan Hoernes and Wolf-gang Grimmeisen, (Engineering, Construction, and Op-erations in Space IV, Rodney G, Galloway, ed. and Stanley Lokaj, ed., 1994), p1210-1219.

Oxygen Generation from Synthetic Moon Soil Using a Plasma Reactor, P. R. Taylor, S. A. Pirzada, K. A. Prisbrey, H. Gold and R. E. Hicks, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1178-1187.

A Practical Application of Concession Schemes to Space Energy Projects, Michel Lyonnet du Moutier, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p658-

667.

Production of Lunar Concrete Using Molten Sulfur, Husam A. Omar and Mohsen Issa, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p952-959.

Propulsion Systems for Future Space Exploration, Michael B. Delclos, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p765-768.

Recycled Engineering Applied to the First Lunar Outpost, Todd C. Parfet and Belinda S. Deeds, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p988-997.

Reduction, Reuse, and Recycling on a Future Lunar Base, Sarah Soliz, Laura Symonds and Christine Willan, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994),

Reliability of Structures for the Moon, Haym Benaroya, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed.,

1994), p166-175.

A Remote Sensing Evaluation of Lunar Pyroclastic Deposits, B. Ray Hawke and Cassandra R. Coombs, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1008-1019.

Remote Sensing of Astrofuel™, K. R. Harris, H. Y. Khater and G. L. Kulcinski, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and

Stanley Lokaj, ed., 1994), p648-657.

Resource Recovery Facilities for Earth Approaching Com-ets, Thomas C. Taylor, Anthony C. Zuppero and Lucy-Ann McFadden, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p562-571.

Roles of the Lunar-Solar Power System In Development of the Resources of Greater Earth for Mankind, David R. Criswell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj,

ed., 1994), p638-647.

Science Operations and Engineering Impacts to Lunar Outpost Design, John E. Gruener and David S. McKay. (Engoster) gineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p998-1007.

Sintering Bricks on the Moon, Carlton C. Allen, John C. Graf and David S. McKay, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1220-1229.

Space Policy: Key Points of International Law, Victor Tim-mons and Teresa Laguatan, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed.

and Stanley Lokaj, ed., 1994), p815-819.

A Surface Exploration Vehicle Testbed for Real-Time Control Exerimentation, Songjae Lee, R. Michael Brown, Ta-Yu Yuan, Chih-Kang Chao, Dhaval Patel, Gordon K. Lee and Robert B. Kelley, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1333-

Terrestrial Analogs: Implications for Lunar Lava Tubes, Cassandra R. Coombs and B. Ray Hawke, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1138-

Transfer Vehicle Sizing for Missions to Mars, James P. Masciarelli, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1355-1364.

Transferring Construction Technology to the Moon and Back, John F. Connolly and Debra D. Shoots, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1086-1096.

Transport Infrastructure Choices for Industrial Cis-lunar Traffic, John Sved, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p587-596.

Space exploration

Astronaut Mark Lee Goes in for Extravehicular Activities of the Close Encounter Kind, NE Nov. 94, p15.

A Comparison of Propulsion Systems for Space Exploration, Ryan D. Hoover, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p751-755.

Damage Tolerance of Thin Composite Reinforced Membrane Structures, Levon Minnetyan, (Engineering, Construction, and Operations in Space IV, Rodney G. loway, ed. and Stanley Lokaj, ed., 1994), p296-305.

Development of a High Resolution Spectrometer for Measuring the Near-Earth RFI Environment: The First Auto-Correlator in Space, Namir E. Kassim, Kurt W. Weiler and Andrew W. Clegg, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1410-1421.

Development, Testing and Modeling of Ceramic Compos-ites for Lunar Applications, János C. Tóth and Chandra S. Desai, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj,

ed., 1994), p358-367.

A Discussion of Nuclear Propulsion in Space Travel, Jeff Mitchell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p756-760.

Effects of Force Reflection on Telerobotic Performance, Raymond Dick, Terry Faddis and Bill Barr, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p259-268.

Fiber Optic Chemical Sensors on Mars, M. A. Butler, A. J. Ricco, F. J. Grunthaner and A. L. Lane, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1345-

Future Launch Systems: The Policy Challenge, Matthew A. Bille, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1452-1461.

Gravitational Wave Astronomy and the Lunar Ligo Concept, Norman LaFave and Thomas L. Wilson, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1442Inertially Favorable Trajectories for Robot Motion in Space, Lyman J. Petrosky and Irving J. Oppenheim, (Ro-botics for Challenging Environments, Laura A. Demsetz,

bottos for Chattenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994). p220-228.
An Inflatable Antenna for Space-Based Low-Frequency Radio Astronomy, John P. Basart, Shreekanth A. Man-dayam and Jack O. Burns, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1390-1399.

An Intelligent Robotic Vehicle for Lunar/Martian Applications, Fei-Yue Wang, Michael Marefat, Paul J. A. Lever and Larry Schooley, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed. and Paul R. Klarer, ed.,

1994), p193-201.

Inter-stellar Propulsion: The Need for Speed, William R. Claycomb, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p737-746.

Is It Possible to Colonize Mars? Jonathan Hurley and Steve Garcia, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj,

ed., 1994), p782-786.

Lunar Base Construction Using the Reinforce Earth Method with Geotextile, Mikiya Okumura, Yasuhiro Ohashi, Takao Ueno, Shojiro Motoyui and Kiosuke Murakawa, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1106-1115.

Lunar ISRU: An Evolutionary Approach, John L. Paterson, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed.,

1994), p1077-1085.

Mars Terraformation Revisited, Joseph Guarascio, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p774-781.

A Minimum Mars Mission Approach, Systems Engineering Division Mars Study Team, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1309-1322.

Mixed-Use Business Park Developments in Space: A Real-Estate Paradigm, Charles J. Lauer, Joseph P. Hopkins, Hugh M. Kelso, Brent Sherwood and Dana G. Andrews, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1471-1481.

Modular Spacecraft, Warren Frisina, AS Oct. 94, p411-

Nanorobots Can Explore Planets, Says Researcher, CE May 94, p19.

A New Airlock Approach for Human Exploration, Stephen Capps, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p206-216.

Next Generation Space Telescope. I: Design Considera-tions, B. Scott May and Nicholas P. Jones, AS Oct. 94,

p355-374.

Next Generation Space Telescope. II: Proposed Pointing Control System, B. Scott May and Nicholas P. Jones, AS

Oct. 94, p375-397.

A Novel Gravity Compensation System for Space Robots, H. B. Brown, Jr. and J. M. Dolan, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p250-258.

Nuclear Propulsion, Evan Dudley, (Engineering, Construc-tion, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p761-764.

Nuclear Propulsion: Safety Measures and Concerns, Lindasy N. Herron, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p747-750.

The Optimal Selection of Robot Modules for Space Manipulators, Robert Ambrose and Delbert Tesar, (Robotics for Challenging Environments, Laura A. Demsetz, ed.

and Paul R. Klarer, ed., 1994), p239-249.

Propulsion Systems for Future Space Exploration, Michael B. Delclos, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p765-768. Propulsion Systems: Present and Future, John Paul Strachan, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p769-773.

Recent Developments in the Robotic All Terrain Lunar Ex-

Recent Developments in the Robotic All Terrain Lunar Exploration Rover (RATLER) Program, P. R. Klarer, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p202-209.
Reducing the Long-Term Effects of Zero-Gravity, Jeremiah Rogers and Sarah Coleman, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Straley Lovic ed. 1904), 923-23-26.

ed. and Stanley Lokaj, ed., 1994), p833-836.
Robotic Options for Mining of Near-Earth Objects, Russell
J. Miller and Robin R. Murphy, (Robotics for Challeng-ing Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p457-463.

Robotics for Challenging Environments, Laura A. Dem-setz, ed. and Paul R. Klarer, ed., 1994, 0-87262-913-9,

490pp.

The Role of Computer Graphics in Teleoperation, Antal K.
Bejczy, Won-Soo Kim and Paul S. Schenker, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p1-9.

Science Operations and Engineering Impacts to Lunar Outpost Design, John E. Gruener and David S. McKay, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994),

Space Commercialization: Problems of Law and Policy, Glenn H. Reynolds, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1462-1470.

Stanley Lokaj, ed., 1994), p1402-1470.
Space Debris, Ankur Gupta, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p820-825.
Space Exploration: Getting a Handle on "Why?", Gordon R. Woodcock, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p960-968.
Space Policy: Key Pojitis of International Law Victor Times

Space Policy: Key Points of International Law, Victor Tim-mons and Teresa Laguatan, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p815-819.
 A Space Station Simulation: EXEMSI '92 A Study on

connnement and Isolation of a Mixed Crew of Four dur-ing 60 Days, J. Collet, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p494-503. Space Stations Past, Present, and Future, Keegan Kim-brough, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p837-841. Confinement and Isolation of a Mixed Crew of Four dur-

A Space Suit for Productive and Safe Extravehicular Activity (EVA), Brand Norman Griffin, (Engineering, Construction, and Operations in Space IV, Rodney G. Gal-loway, ed. and Stanley Lokaj, ed., 1994), p1372-1381. Summary of the NEPSTP Nuclear Safety Program, Al-bert C. Marshall and G. Kompanietz, (Engineering, Con-

struction, and Operations in Space IV, Rodney G. Gal-

struction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p708-716. Surface Payload Unloading and Deployment Options for a Lunar Return Mission, John Connolly and Larry Toups, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1059-1069.

System for Orbital Recovery of Space Shuttle's External Tank, Raul Ferri, AS Jan. 94, p92-103.

Thermal Regeneration of Spent Lithium Hydroxide, Venkatesh Srinivasan and Bernadette Luna, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1036-1045

Transfer Vehicle Sizing for Missions to Mars, James P. Masciarelli, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley

Lokaj, ed., 1994), p1355-1364.

Lokaj, ed., 1994, p. 1353-1504.
An Ultra-Lightweight Advanced Technology Telescope for Space Applications, P. C. Chen, R. J. Oliversen, H. Hojaji, W. K. Chu and T. L. Wilson, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1422-1430.

Update of the Implications of Recent Space Resource Discovery, Anthony Zuppero and Pat Whitman, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p532-541.

Utilization of Liquid Carbon Dioxide for Planetary Exploration, Nobuki Kawashima, Ei-ichi Mizuno, Kazuya Takeda and Masaki Kojima, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1070-1076.

Very Low Frequency Radio Astronomy from Lunar Orbit, Nebojsa Duric and Jack O. Burns, Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1382-1389.

"The Effect of Zero Gravity on Bones", Elizabeth Cassell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p853-856.

Space frames

Active Control of Axial Forces in Beam String Space Frames, Shiro Kato, Shoji Nakazawa, Yasuo Matsue and Tatsuo Yamashita, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p664-673.

Analysis and Design of a Double Layer Barrel Vault with a Large Span, Ruo Jun Qian and Zu Yan Shen, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p401-408.

An Application of Inverse Problem Techniques to Spatial Structures, Pei Shan Chen, Mamoru Kawaguchi and Masaru Abe, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p113-122.

Deployable Mesh Reflector, Z. You and S. Pellegrino, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p103-112.

Equivalent Continuum Model for Deployable Flat Lattice

Structures, Charis Gantes, Jerome J. Connor and Robert D. Logcher, AS Jan. 94, p72-91.

Experimental Study on a Buckling Behavior of a Wooden Single-Layer Space Frame of Reticular Shell on a Hexagonal Plan: Influence due to the Bolted Joint Looseness with Axial and Bending Resistance, Kouichi Matsuno and Shigeru Aoki, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p152-161.

Experimental Study on the Buckling Behavior of a Triodetic Aluminum Space Frame: No. 2 Ultimate Bearing Strength of a Single Layer Space Frame, Kenichi Sugizake and Shigeru Kohmura, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p479-488.

Hyper-Geodesic Structures: Excerpts from a Visual Catalog, Haresh Lalvani, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1053-1064.

Lower Bounds for Overall Buckling of Spherical Space Domes, M. Kashani and J. G. A. Croll, EM May 94, p949-970.

Non-Linear Solution Methods for Shell and Spatial Structures, M. Papadrakakis, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p180-189.

Nonlinear Buckling Response of Single Layer Latticed Barrel Vaults, Seishi Yamada and Takashi Taguchi, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p519-528.

On some Problems of the Multicriteria Optimization of the Spatial Grid Structures, Jan A. Karczewski and Witold M. Paczkowski, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p162-171.

Possibilities and Problems of Latticed Structures, Mamoru Kawaguchi, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p350-376. Project Case Study: Space Frame Roof Structure, Main Stadium, Shah Alam Sport Complex, Selangor, Malaysia, James A. Moses, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p377-382.

A Quasicrystal for Denmark's Coast, Tony Robbin, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), 1015.

p1045-1052.

Roof Space Frame Design of the C.K.S. Airport Passenger Terminal II. Yen-Po Chen and Hung-Tao Chao, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p57-66.

Space Frame Solution for the Design of Large Pyramid Structures, T. J. DeGanyar, M. D. Griffin and M. R. Patterson, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p47-56.

Space Frames and Polyhedra, J. François Gabriel, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1036-1044.

Space-Frame Pyramid, Michael D. Griffin, Michael R. Patterson and Tejav J. DeGanyar, CE Nov. 94, p68-70.

Structural Failure and Quality Assurance of Space Frames, Tien T. Lan, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p123-132.

Study on Mechanical Characteristics of Light-weight Complex Structure Composed of a Membrane and a Beam String Structure, Masao Saitoh, Akira Okada, Katsuo Maejima and Tetsuo Gohda, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p632-641.

Space prob

Application of Virtual Reality to Space Robotics Operations, David A. Read, Ken J. Ruta and Bradley N. Bell, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p19-27.

Development of a High Resolution Spectrometer for Measuring the Near-Earth RFI Environment: The First Auto-Correlator in Space, Namir E. Kassim, Kurt W. Weiler and Andrew W. Clegg, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1410-1421.

Gravitational Wave Astronomy and the Lunar Ligo Concept, Norman LaFave and Thomas L. Wilson, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed. 1994), p1442-1451.

An Inflatable Antenna for Space-Based Low-Frequency Radio Astronomy, John P. Basart, Shreekanth A. Mandayam and Jack O. Burns, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1390-1399.

The Levitation of Lunar Dust Via Electrostatic Forces, S. Doe, J. O. Burns, D. Pettit, J. Blacic and P. W. Keaton, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p907-915.

Low Frequency Radio Astronomy from Earth or Lunar Orbit, Jack O. Burns, John P. Basart and Bernard M. McCune, (Engineering, Construction, and Operations in Space IV. Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1400-1409.

The Lunar Ultraviolet Telescope Experiment (LUTE), John D. Hilchey and Max E. Nein, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1431-1441.

"The Potential for the Department of Defense to Use Space-Based Remote Sensing to Support DOD and Other Government Agencies' Environmental Programs", Donald R. Artis, Jr., (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p542-552.

Space reconnaissance

Overview of Space Environmental Effects, Alan J. Watts, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p628-637.

Space shuttle orbiter

Alternative Launch Systems Will They Replace the Shuttle? Daphne Burleson, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p472-577.

Application of Virtual Reality to Space Robotics Operations, David A. Read, Ken J. Ruta and Bradley N. Bell, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p19-27.

Astronaut Mark Lee Goes in for Extravehicular Activities of the Close Encounter Kind, NE Nov. 94, p15.

Construction Operations on the OUTPOST Platform in Orbit, Thomas C. Taylor, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p423-432.

The Effect of Mobile Transporter Motion on the Space Station Attitude Control System, Tsay-Hsin G. Hu, Jalal Mapar and Ben C. Barker, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p453-462.

Integrated Spacecraft Environments Model (ISEM), Ray Rantanen and Tim Gordon, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed.

and Stanley Lokaj, ed., 1994), p609-617.

Interactions Between the Space Station Freedom Attitude Control System and Space Shuttle Remote Manipulator Controller During On-Orbit Assembly Operations, James Controller During On-Orbit Assembly Operations, statuses
T. Kaidy, Jalal Mapar and Ben C. Barker, (Engineering,
Construction, and Operations in Space IV, Rodney G.
Galloway, ed. and Stanley Lokaj, ed., 1994), p433-452.
On the Dynamics and Control of Flexible Orbiting Sys-

tems: An Approach with Application, V. J. Modi and A. Suleman, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1-17.

Potential demand for passenger travel to orbit, Patrick Col-lins, Yoichi Iwasaki, Hideki Kanayama and Misuzu Oka-zaki, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p578-586.

Spectral Representation of High-Frequency Space Shuttle Data, P. D. Spanos, L. J. Mushung, D. A. Nelson, Jr. and D. A. Hamilton, AS July 94, p315-327.

Use of GPS for Tethered Satellite Position Determination. Bjorn L. Johns and George W. Morgenthaler, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p64-79.

Zero-Gravity Sports Centers, Patrick Collins, Takashi Fukuoka and Tsuyoshi Nishimura, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p504-513.

Space stations

Adaptive Space Station Technologies and Systems for a Lunar Surface Return Mission, Larry Toups and Sam Ximenes, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p483-493.

Analysis of Inflating Habitable Space Structures with neomass (near-Earth-object mass), Anthony Zuppero, Nancy Linarez-Royce and Pat Whitman, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p247-256.

Application of Virtual Reality to Space Robotics Opera-tions, David A. Read, Ken J. Ruta and Bradley N. Bell, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p19-27.

Conceptual Design and Characteristics of A Dual-Arm Cam-Lock Manipulator, Ali Meghdari, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p140-148.

Construction Operations on the OUTPOST Platform in Orbit, Thomas C. Taylor, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p423-432.

Dynamic Optimization by Small Variation of the System Layout, Zdzislaw A. Parszewski, (Engineering, Con-struction, and Operations in Space IV, Rodney G. Gal-loway, ed. and Stanley Lokaj, ed., 1994), p1492-1503.

The Effect of Mobile Transporter Motion on the Space Station Attitude Control System, Tsay-Hsin G. Hu, Jalal Mapar and Ben C. Barker, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p453-462.

Enabler Chassis Features and Mobiltiy Analysis, James S. Hollinger, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994),

622

Engineering, Construction, and Operations in Space IV, 2 vols, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994, 0-87262-937-6, 1560pp.

Erectable Truss Hardware for Large Space Structures, Raymond E. Dick, Terry N. Faddis and Bill G. Barr, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p414-422

Feasibility of Treating Synthetic Greywater by Culturing Waldmann's Dark Green Lettuce in a Hydroponic Syswandmann's Bark Green Lettuce in a rydropomic Sys-tem, Ricardo B. Jacquez and Michael Montoya, (Engi-neering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1256-1265.

Global Environmental Change: Geoengineering Technology, Lyle M. Jenkins, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and

Stanley Lokaj, ed., 1994), p524-531.

GPS-Based Control for Space Vehicle Rendezvous, Kurt R. Zimmerman and Robert H. Cannon, Jr., (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p61-69.

Interactions Between the Space Station Freedom Attitude Control System and Space Shuttle Remote Manipulator Controller During On-Orbit Assembly Operations, James T. Kaidy, Jalal Mapar and Ben C. Barker, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p433-452.

Methods to Mitigate Thermally Induced Distortion, Fred M. Cutting, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p514-523.

Microgravity Research in a Space Station Environment, Steven D. Del Basso, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p473-482.

Microtasking, Macrotasking, and Autotasking for Structur-al Optimization, A. Saleh and H. Adeli, AS Apr. 94,

p156-174.

Mixed-Use Business Park Developments in Space: A Real-Estate Paradigm, Charles J. Lauer, Joseph P. Hopkins, Hugh M. Kelso, Brent Sherwood and Dana G. Andrews, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1471-1481.

Modeling of Interaction of Small Particulates in Earth Orbit, Anthony F. Beverina and Christopher A. Dobosz, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p597-608.

Modular Spacecraft, Warren Frisina, AS Oct. 94, p411-416

A New Airlock Approach for Human Exploration, Stephen Capps, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p206-216.

A Novel Gravity Compensation System for Space Robots, H. B. Brown, Jr. and J. M. Dolan, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p250-258.

On the Dynamics and Control of Flexible Orbiting Systems: An Approach with Application, V. J. Modi and A. Suleman, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj,

ed., 1994), p1-17.

The Optimal Selection of Robot Modules for Space Manipulators, Robert Ambrose and Delbert Tesar, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p239-249.

Space Station Microgravity Analysis and Assessment, John P. Wetzel, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p463-472.
A Space Station of Mars, Kimberly Butler, (Engineering,

Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p787-792.

A Space Station Simulation: EXEMSI '92 A Study on Confinement and Isolation of a Mixed Crew of Four during 60 Days, J. Collet, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p494-503.

Space Stations Past, Present, and Future, Keegan Kimbrough, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj,

ed., 1994), p837-841.

Using a Small Satellite Bus As a Dedicated Platform for On-Orbit CSI Experiments, Andrew S. Bicos and Gregory G. Loboda, (Engineering, Construction, and Opera-tions in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p37-46.

Wheel Space Station for 2025, Jason Hand and David Hargis, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj,

ed., 1994), p846-852.

Zero-Gravity Sports Centers, Patrick Collins, Takashi Fu-kuoka and Tsuyoshi Nishimura, (Engineering, Construc-tion, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p504-513.

Space structures

Analysis of Inflating Habitable Space Structures with naysis of initiating radiative space soluctures with neomass (near-Earth-object mass), Anthony Zuppero, Nancy Linarez-Royce and Pat Whitman, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p247-256.

Atmospheric Pressure within Lunar Structure, Paul S. Nowak, Jeffrey Janakus and Charles E. Mitchell, AS Oct.

94, p398-410.

Augmented Lagrangian Genetic Algorithm for Structural Optimization, Hojjat Adeli and Nai-Tsang Cheng, AS

Jan. 94, p104-118

Behavior of Bolted Joints in 3-D Braided Composites, Rona L. Reid and Aly El-Shiekh, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p287-295.

Cable-Based Lunar Transportation System, Leonhard E. Bernold, AS Jan. 94, p1-16.

Collapse Behavior of Double-Layer Space Truss Grids with Member Buckling, Toshitsugu Saka and Yoshiya Taniguchi, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p529-538.

Conceptual Design and Characteristics of A Dual-Arm Cam-Lock Manipulator, Ali Meghdari, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and

Paul R. Klarer, ed., 1994), p140-148.

Concurrent Genetic Algorithms for Optimization of Large Structures, Hojjat Adeli and Nai-Tsang Cheng, AS July 94, p276-296.

Considerations for Design Criteria for Lunar Structures, Eric P. Steinberg and William Bulleit, AS Apr. 94, p188-198.

Construction Operations on the OUTPOST Platform in Orbit, Thomas C. Taylor, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p423-432.

Continuous Dynamic Model for Tapered Beam-Like Structures, Ji Yao Shen, Elias G. Abu-Saba, William M. McGinley, Lonnie Sharpe, Jr. and Lawrence W. Taylor,

Jr., AS Oct. 94, p435-445.

Continuous Pulse Control of Structures with Material Nonlinearity, Chris P. Pantelides and Paul A. Nelson, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p300-309.

Direct and Modal Analyses for Shape-Finding of Unstable Structures, Tetsuyuki Tanami and Yasuhiko Hangai, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p714-723.

Discrete Field Stability Analysis of X-Braced Lattices, Raja R. A. Issa and R. Richard Avent, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard,

ed. and Celina U. Penalba, ed., 1994), p450-459. A Distributed Parameter Model for the Dynamic Analysis of Beam-like Structures with Varied Sectional Properties, Ji Yao Shen, Elias G. Abu-Saba, William M. McGinley, Lonnie Sharpe, Jr. and Lawrence W. Taylor, Jr., (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p110-123

Drivetrain Design, Incorporating Redundancy, for an Autonomous Walking Robot, Gerald P. Roston and Kevin Dowling, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p184-

Dynamic Effects of Progressive Member Failure on the Response of Truss Structures, Ramesh B. Malla, Baihai Wang and Butchi B. Nalluri, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B.

Malla, 1993), p60-76.
The Effect of Member Snap on Progressive Collapse of Space Structures, Nicholas F. Morris, (Dynamic Response and Progressive Failure of Special Structures,

Ramesh B. Malla, 1993), p17-31.

Engineering, Construction, and Operations in Space IV, 2 vols, Rodney G. Galloway, ed. and Stanley Lokaj, ed.,

1994, 0-87262-937-6, 1560pp.

mond E. Dick, Terry N. Faddis and Bill G. Barr, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p414-422. Erectable Truss Hardware for Large Space Structures, Ray-

For the Realization of Lunar Concrete, Hiroshi Kanamori, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p942-951.

Generalized Object Control and Assembly for Space Ro-bots, Jeff Russakow and Stephen Rock, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p149-157.

Hyper-Geodesic Structures: Excerpts from a Visual Catalog, Haresh Lalvani, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina

U. Penalba, ed., 1994), p1053-1064. An Intelligent Robotic Vehicle for Lunar/Martian Applicain mengein Robotic Ventre for EditaryNational Applica-tions, Fei-Yue Wang, Michael Marefat, Paul J. A. Lever and Larry Schooley, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p193-201.

The Kinematic Design of a Robotic Large Space Structure Construction Service, Mark R. Routson, Jackson C. S. Yang and Thomas C. Taylor, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p229-238.

Microtasking, Macrotasking, and Autotasking for Structur-al Optimization, A. Saleh and H. Adeli, AS Apr. 94, p156-174.

A Mobile System for the Remote Assembly of Planetary Structures, P. T. Boissiere, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p278-285.

Morphology of Reciprocal Frame Three-Dimensional Gril-lage Structures, John C. Chilton, Ban Seng Choo and Jia Yu, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1065-1074.

The Nature of Structural Morphology and Some Interdisci-plinary Examples, Ture Wester, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1000-1009.

Optimization of Space Lattice Structures with Multimodal Frequency Constraints, J. Czyz and S. Lukasiewicz, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p419-429.

Optimization of Space Trusses on Vector Multiprocessor, H. Adeli and H. -L. Hsu, AS Jan. 94, p120-126.

A Practical Design and Construction of Tension Rod Sup-ported Glazing, Toru Takeuchi, Haruyuki Kitamura, Kimiaki Harada, Kohei Higuchi, Akiho Harada and Mamoru Iwata, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p684-693.

A Quasicrystal for Denmark's Coast, Tony Robbin, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994),

p1045-1052

Research and Application of Various Joints of Space Grid Structures in China, Xi-Liang Liu, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p221-228.

Response of Truss Structures Subjected to Dynamic Loads During Member Failure, Ramesh B. Malla and Butchi, B. Nalluri, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penal-

ba, ed., 1994), p249-258.

Sensitivity and Optimum Structural Design, Witold Gutkowski and Jacek Bauer, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p330-339.

Space Frames and Polyhedra, J. François Gabriel, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1036-1044.

Spacecraft Wall Design for Orbital Debris Impact, Shyh-Rong Tzan and Chris P. Pantelides, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p378-387.

Spatial Structures Erected out of Thin Shell Elements Fab ricated on Plane Followed by Bending, Vladimir V. Shugaev, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p867-876.

Structural Integrity of Space Trusses, Erling Murtha-Smith, Anurag Chaturvedi and Shawn F. Leary, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p409-418.

Tensegrity Structures: Filling the Gap Between Art and Science, Michele Melaragno, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1024-1035.

Thermoelastic Theory of Cylindrical Sandwich Shells with Piezoelectric Sensors or Actuators, Victor Birman, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p80-88.

Welded Joints for Robotic On-Orbit Assembly of Space Structures, William K. Rule and Frank P. Thomas, AS Apr. 94, p209-224.

Space truss

The Challenge of Housing the Largest Detector, Prabir Das, C. J. Roth and Nachum Secker, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p755-760.

Compression-Member Models for Space Trusses: Review, Erling Murtha-Smith, ST Aug. 94, p2399-2407.

I.P.L. Space Trusses: Structural Performance and Analysis, M. Burt, D. Shriftailig, V. Babaev, A. Bogdanov and D. Beilin, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1075-1081.

Nonlinear Analysis of Space Trusses, Erling Murtha-Smith, ST Sept. 94, p2717-2736.

Response of Space Trusses During Progressive Failure, George E. Blandford and Shien T. Wang, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p1-16.

Allowable Design Loads for Marman Clamp Systems, Robert DiTolla and Michael Ernst, (Engineering, Con-struction, and Operations in Space IV, Rodney G. Gal-loway, ed. and Stanley Lokaj, ed., 1994), p217-226. Alternative Habitat Concepts for the First Lunar Outpost, Kriss Kennedy and Michael Roberts, (Engineering, Con-struction, and Operations in Space IV, Rodney G. Gal-loway, ed. and Stanley Lokaj, ed., 1994), p1020-1035.

Analysis of Inflating Habitable Space Structures with neomass (near-Earth-object mass), Anthony Zuppero, Nancy Linarez-Royce and Pat Whitman, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p247-256.

ARIANE-5 Launch Operations Construction and Opera-tion of a New Launch Complex for Lower Cost, Higher Reliability Missions, Juan de Dalmau, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1521-

A Comparison of Propulsion Systems for Space Exploration, Ryan D. Hoover, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p751-755.

Development of a Partial Gravity Lunar Airlock, David John Gutierrez, (Engineering, Construction, and Opera-tions in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p227-236.

A Discussion of Nuclear Propulsion in Space Travel, Jeff Mitchell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p756-760.

Future Launch Systems: The Policy Challenge, Matthew A. Bille, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1452-1461.

GPS-Based Control for Space Vehicle Rendezvous, Kurt R. Zimmerman and Robert H. Cannon, Jr., (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p61-69.

Integrated Spacecraft Environments Model (ISEM), Ray Rantanen and Tim Gordon, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p609-617.

Inter-stellar Propulsion: The Need for Speed, William R. Claycomb, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p737-746.

The LEO Particulate Environment as Determined by LDEF, Thomas H. See, Michael E. Zolensky, Friedrich Hörz, Ronald P. Bernhard, Kimberly S. Leago, Jack L. Warren, Clyde A. Sapp, Tammy R. Foster and William H. Kinard, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p618-627.

Modeling of Interaction of Small Particulates in Earth Orbit, Anthony F. Beverina and Christopher A. Dobosz, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p597-608.

Modular Spacecraft, Warren Frisina, AS Oct. 94, p411-416.

Next Generation Space Telescope. I: Design Considera-tions, B. Scott May and Nicholas P. Jones, AS Oct. 94,

Next Generation Space Telescope. II: Proposed Pointing Control System, B. Scott May and Nicholas P. Jones, AS Oct. 94, p375-397

Nuclear Propulsion, Evan Dudley, (Engineering, Construc-tion, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p761-764.

Nuclear Propulsion: Safety Measures and Concerns, Lindsay N. Herron, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p747-750.

On the Dynamics and Control of Flexible Orbiting Systems: An Approach with Application, V. J. Modi and A. Suleman, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1-17.

Optical Scatter From a Space Craft Mirror Due to Microscopic Impacts, Lawrence B. Crowell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p368-377. Potential demand for passenger travel to orbit, Patrick Col-lins, Yoichi Iwasaki, Hideki Kanayama and Misuzu Okazaki, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p578-586.

Propulsion Systems for Future Space Exploration, Michael B. Delclos, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p765-768.

Propulsion Systems: Present and Future, John Paul Strachan, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p769-773.

Recycled Engineering Applied to the First Lunar Outpost, Todd C. Parfet and Belinda S. Deeds, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p988-997.

Space Debris, Ankur Gupta, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p820-825.
A Space Suit for Productive and Safe Extravehicular Ac-

struction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1372-1381.

Spacecab: A Concept for Commercial Human Spaceflight, Andrew Petro, (Engineering, Construction, and Opera-tions in Space IV, Rodney G. Galloway, ed. and Stanley

Lokaj, ed., 1994), p1504-1511.

Spacecraft Wall Design for Orbital Debris Impact, Shyh-Rong Tzan and Chris P. Pantelides, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p378-387

A Summary of the NEPSTP Nuclear Safety Program, Albert C. Marshall and G. Kompanietz, (Engineering, Construction, and Operations in Space IV, Rodney G. Gallery, and Construction of Construct loway, ed. and Stanley Lokaj, ed., 1994), p708-716.

Surface Payload Unloading and Deployment Options for a Lunar Return Mission, John Connolly and Larry Toups, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1059-1069.

System for Orbital Recovery of Space Shuttle's External Tank, Raul Ferri, AS Jan. 94, p92-103.

Thermal Cycling of Thin and Thick Ply Composites, Stephen S. Tompkins, James Y. Shen and Andre J. Lavoie, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p326-335.

TOPAZ II Qualification and Nuclear Testing Program, G. L. Schmidt, F. Thome, B. Ogloblin and E. Glushkov, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p729-738.

TOPAZ II System Description, Susan S. Voss, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p717-728

Use of GPS for Tethered Satellite Position Determination, Bjorn L. Johns and George W. Morgenthaler, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p64-79.

Using a Small Satellite Bus As a Dedicated Platform for On-Orbit CSI Experiments, Andrew S. Bicos and Grego-ry G. Loboda, (Engineering, Construction, and Opera-tions in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p37-46.

Utilization of Liquid Carbon Dioxide for Planetary Exploration, Nobuki Kawashima, Ei-ichi Mizuno, Kazuya Takeda and Masaki Kojima, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1070-1076.

"The Effect of Zero Gravity on Bones", Elizabeth Cassell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed.,

1994), p853-856.

Drain-Spacing Calculation Considering Influence of Evaporation, Wang Wenyan, Shen Bing and Li Zhilu, IR May/June 94, p563-572.

Dynamic Compaction of Loose Granular Soils: Effect of Print Spacing, Y. K. Chow, D. M. Yong, K. Y. Yong and S. L. Lee, GT July 94, p1115-1133.

Equilibrium Beach Profiles on the Catalan Coast, J. P. Sierra. A. Lo Presti and A. Sánchez-Arcilla, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p432-445.

Field Measurements in a Tidal River Estuary on the Canta-brian Coast, Spain, D. A. Huntley, M. A. Losada, R. Medina, C. Vidal and K. Stapleton, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p143-157.

Final Storage of High Activity Waste in Spain, Aurelio Uli-barri, Fernando Huertas and Jesús Alonso, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p538-548.

Overview of the Spanish High Level Radioactive Waste Programme, A. López and A. R. Beceiro, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2284-2290.

Mathematics of Concrete Scaling, Dan F. Adkins, Gary P. Merkley and Gertrudys Brito, MT May 93, p280-288.

Spalling of Continuously Reinforced Concrete Pavements, Dan G. Zollinger, Sanjaya P. Senadheera and Tianxi Tang, TE May/June 94, p394-411.

Spatial analysis

ARC/HEC2: an ARC/INFO - HEC-2 Interface, Dean Djokic, Mark A. Beavers and Chandrashekar K. Deshakulakarni, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p41-44.

Automated Field Irrigation System Using Side Weirs, R. Singh and T. Satyanarayana, IR Jan./Feb. 94, p48-59.

Decision Support System for Wetland Development at a Landscape Level, Luis A. Garcia, Rolando Vadas, Steffen Meyer, John Ternlund and Jack Cunningham, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p291-294.

Determination of Look Angles to Geostationary Communi-cation Satellites, Tomás Soler and David W. Eisemann,

SU Aug. 94, p115-127.

Integration of Water Resource Models and GIS for Water Resource Management, Roger T. Kilgore, Joseph S. Krolak and Michael Walsh, (*Water Policy and Management: Solving the Problems*, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p37-40.

Overflow Elimination Benefits from GIS Based Technology, Rod Thornhill, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p829-835.

A Preliminary Characterization of the Spatial Variability of Precipitation at Yucca Mountain, Nevada, Joseph A. Hevesi, Dale S. Ambos and Alan L. Flint, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2520-2529.

Temporal and Spatial Variations of Suspended Sediment Concentration during Navigation Traffic in a Natural River, Renjie Xia, Ta Wei Soong and Nani G. Bhowmik, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1131-1135.

Time-Space Tradeoff Strategies for Space-Schedule Construction, Pierrette P. Zouein and Iris D. Tommelein, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1180-1187.

3-D Coordinates - A Universal Rectangular Coordinate System for a GIS and Other Spatial Databases, Earl F. Burkholder, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p233-240.

Computational Discretization Effect on Rainfall-Runoff Simulation, Edward Mazion, Jr. and Ben Chie Yen, WR

Sept./Oct. 94, p715-734.

Developing a National Spatial Data Infrastructure, John McLaughlin and Sue Nichols, SU May 94, p62-76. Estimating Autocovariance of In-Situ Soil Properties, Don

J. DeGroot and Gregory B. Baecher, GT Jan. 93, p147-

Extended Topology in Building Design Systems, Godfried Augenbroe and Wouter Rombouts, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1196-1203.

Ground-Motion Spatial Variation Effects on Circular Arch Responses, Hong Hao, EM Nov. 94, p2326-2341. Interactive Design of Service Routes, Jin-Yuan Wang and

Jeff R. Wright, TE Nov./Dec. 94, p897-913.

The National Spatial Data Infrastructure and its Usefulness to the Dredging Community, Milington Lockwood, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p516-

New Crack-Imaging Procedure Using Spatial Autocorrelation Function, H. Lee and H. Oshima, TE Mar./Apr. 94,

p206-228.

On some Problems of the Multicriteria Optimization of the Spatial Grid Structures, Jan A. Karczewski and Witold M. Paczkowski, (*Spatial, Lattice and Tension Structures*, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p162-171.

Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994,

0-87262-953-8, 1115pp.

Supercritical Flow in Circular-Shaped Side Weir, Willi H. Hager, IR Jan./Feb. 94, p1-12.

TIGER and Census Bureau Data in a GIS: A Powerful Combination for Civil Engineers, Robert W. Marx, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p225-232.

Spatial distribution

The Effects of Spatial Resolution in Modeling the North Fork Drainage of the Gunnison River Basin, Leslie Fran-koski, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p29-32.

Effects of Spatial Triangulation on the Behavior of "Tensegrity" Domes, David M. Campbell, David Chen, Paul A. Gossen and Kris P. Hamilton, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p652-663.

Some Benefits of Grid by Number Sampling, David
Crowder and Panayiotis Diplas, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p795-799.

Verification of Numerical Modeling of the Fate of Disposed Dredged Material, Michelle M. Thevenot and Billy H. Johnson, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p180-189.

Wave Attenuation in Elastic Continuum with Attenuating Neighborhood, Songtao Xue, Jun Tobita and Masanori Izumi, EM Mar. 94, p419-430.

Specifications

Analysis of I-Girder Highway Bridges, Kassim M. Tarhini, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p684-687.

Asphalt Applications for Railroad Maintenance and Construction, Jerry G. Rose, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994),

Behavior of Gypsum-Sheathed Cold-Formed Steel Wall Studs, Thomas H. Miller and Teoman Pekoz, ST May

94, p1644-1650.

Comparison of Nuclear and Core Pavement Density Measurements, Steve R. Sanders, Debasis Rath and Frazier Parker, Jr., TE Nov./Dec. 94, p953-966

Creation of a Modernized Land Information System for Milwaukee County, Kurt W. Bauer, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p220.

Design of Frames Using Notional Horizontal Force, S. Toma, J. Takamatsu and N. Nishihata, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1161-1166.

Developing Specifications for Cellular-Telephone Base Stations, John C. Woolery, CO Sept. 94, p593-602.

Developing Standardized Connection Analysis Techniques for Slim Hole Core Rod Designs, Gregory Fehr and Ed-mond I. Bailey, (High Level Radioactive Waste Manage-ment, High Level Radioactive Waste Program Committee, 1994), p1048-1054.

Development of Bridge Live Load Models, John M. Kulicki, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p532-537.

Durable Concrete, Bryant Mather, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep

L. Sarkar, ed., 1994), p52-63.

Flexural Member Bending Strength Limits in the New LRFD Bridge Code, Karl H. Frank, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p544-548.

Formal Specification of AEC Product Models, Harpreet S. Chadha, John W. Baugh, Jr. and Jeannette M. Wing, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p571-578.

Horizontally Curved Steel Bridge Research-Update 2, S. R. Duwadi, J. M. Yadlosky and C. H. Yoo, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1071-1076.

January Cover Photo is Misleading (ltr), CE Mar. 94, p36. Load and Resistance Factors for Bridge Design Code, Andrzej S. Nowak, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p538-543.

Modeling Engineering Design Information: An Object-Centered Approach, M. Maher Hakim and James H. Gar-rett, Jr., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p563-570.

An Overview of Shotcrete Usage on the SSC, Steven H. Baldauf, (Structures Congress XII, N. C. Baker, ed. and

Barry J. Loodno, ed., 1994), p773-778.

Performance of Gunite Brow Ditches, Robert W. Day, IR

Sept./Oct. 94, p957-963.

Representation and Processing of Design Standards: a Bifurcation between Research and Practice, Steven J. Fenves, James H. Garrett and M. Maher Hakim, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p122-127.

Specification Contract Effects on Hydraulic Designs, Jeff Baysinger and Leo Kinney, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed.,

1994), p152-158.

Specification Needs for FRP Composite Products, Craig A. Ballinger, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p56-63.

Standard Practice for Direct Design of Buried Precast Concrete Pipe Using Standard Installations (SIDD) (St No. 93-015), American Society of Civil Engineers, 1994, 0-87262-995-3, 50pp.

Steel Raw Water Pipeline Design Development, Steven J. Troch, Roger Strube and Lynn Hill, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p473-491.

Unbound Drainable Base Courses: Permeability Versus Unsurfaced Stability, Reed B. Freeman and Gary L Anderton, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p685-692.

Unified Code Provisions for Concrete Bridges, Antoine E. Naaman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p555-560.

Use of Low Density Polyethylene to Modify Asphalt Mix-tures, Fouad M. Bayomy and Glenn D. Carraux, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p303-310.

Writing Effective Specifications, Madan L. Arora, CE Mar. 94, p69-71.

Field Tests of Railway Bridges, D. A. Foutch, D. H. Tobias and J. Choros, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1118-1123.

Stability Analysis of Rayleigh-Benard Convection in the Presence of Side Walls, P. Diplas and C. Dietz, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p82-86.

Spectral analysis

About the Range of Validity of Different Spectral Models for Wind-Generated Gravity Waves, Rodríguez R. Germán and Q. José Jiménez, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p755-769.

- Automated Surface Wave Method: Inversion Technique, Deren Yuan and Soheil Nazarian, GT July 93, p1112-1126.
- Determining Plutonium Concentration in Solution Using a Germanium Crystal and a New L X-Ray/y-Ray Spectrographic Method, Raymond C. Gatti, Heino Nitsche, Scott A. Carpenter, Kevin E. Roberts, Becraft Kevin A. and Traudel G. Prussin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2719-2729.
- Estimation of Wave Directional Spectra from Pitch-Roll Buoy Data, F. P. Brissette and I. K. Tsanis, WW Jan./ Feb. 94, p93-115.
- Field Test of Buried Ocean-Wave Directional Spectrometer System, Tom Nye and Tokuo Yamamoto, WW Sept./ Oct. 94, p451-467.
- Image Analysis of Surf Zone Hydrodynamics, J. M. Redondo, A. Rodriguez, E. Bahia, A. Falqués, V. Gracia, A. Sánchez-Arcilla and M. J. F. Stive, Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p350-365.
- New Technology in Coastal Wave Monitoring, Richard Seymour, David Castel, David McGehee, Juliana Thomas and William O'Reilly, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p105-123.
- Performance Evaluation of Offshore Breakwaters a Field and Computational Study, Andrew J. Chadwick, Christoper Fleming, Jonathan Simm and Geoffrey N. Bullock, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p950-961
- Principal Components Time Spectra of Suspended Sediment in Random Waves, Onyx W. H. Wai, Keith W. Bedford and Sean T. O'Neil, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p296-305.
- Seismic Random-Vibration Analysis of Multisupport-Structural Systems, Ernesto Heredia-Zavoni and Erik H. Vanmarcke, EM May 94, p1107-1128.
- Spectral Analysis of Fluid Flow in Oscillating Grid Reactor, Leonard W. Casson, Desmond F. Lawler and David G. Bogard, EM Feb. 94, p346-367.
- Spectral Representation of High-Frequency Space Shuttle Data, P. D. Spanos, L. J. Mushung, D. A. Nelson, Jr. and D. A. Hamilton, AS July 94, p315-327.

Spectral density function

About the Range of Validity of Different Spectral Models for Wind-Generated Gravity Waves, Rodríguez R. Germán and Q. José Jiménez, (*Coastal Dynamics '94*, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p755-769.

Speech recognition

- Mobile GIS Technologies, John Alexander, Jerry Merckel, Kirk Upthegrove and David Martini, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1623-1630.
- Voice Operated Information System (VOIS) for Electronic Pages Information System, Prasuna DVG Reddy, Ryuchi Kitamura and Paul P. Jovanis, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1524-1531.

Speed

- Importance of Speed and Frequency in Flexible Pavement Response, M. S. A. Hardy and D. Cebon, EM Mar. 94, p463-482
- Optimization Procedure for Design of High-Speed Prop-Rotors, Aditi Chattopadhyay and Johnny R. Narayan, AS Apr. 94, p143-155.
- Optimum Curvature for Simple Horizontal Curves, Prianka N. Seneviratne and M. Nazrul Islam, TE Sept./Oct. 94, p773-786.
- A Speed Prediction Model for New Zealand Highways, Christopher R. Bennett and Roger C. M. Dunn, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p728-734.

- Speed control
- Geometric Characterization of Road Humps for Speed-Control Design, T. F. Fwa and L. S. Tan, TE July/Aug. 92, p593-598.

Speed reduction

Breakout Session 4B: Speed and Vehicle Mix, Arun Chatterjee, Lawrence Tittemore and Roy Turner, (*Transportation Planning and Air Quality II*, Thomas F. Wholly, ed., 1994), p.153.

Spencer, G. Richard

Charles A. Parthum Is 1994 Nominee for ASCE President-Elect, NE July 94, p3.

Spheres

- Hollow Spheres Subjected to Sustained and Variable Loads, Wei Jiang, EM June 94, p1343-1368.
- Shakedown Analysis of Hollow Spheres, Wei Jiang, EM July 94, p1447-1480.

Spherical shells

Three-Dimensional Solutions for Thermomechanical Stresses in Sandwich Panels and Shells, W. Scott Burton and Ahmed K. Noor, EM Oct. 94, p2044-2071.

Snills

- Effects of Lateral Heading Flow Steadiness on Lateral Spillage, Eduardo A. Latimer, Michael R. Petersen and Andrew A. Keller, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p115-118.
- A Mobile Robot for Reconnaissance of HAZMAT Incident Sites, Richard V. Welch, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p.269-277.

Spillway capacity

Unsteady Spillway Inlet Conditions at the Weatherford Water Supply Reservoir, Steven L. Barfuss, J. Paul Tullis and Stuart R. Wilson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p558-562.

Spillways

- Air Concentration Measurements in Highly-Turbulent Flow on a Steeply-Sloping Chute, James F. Ruff and Kathleen H. Frizell, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p999-1003.
- Alternatives for Overtopping Protection of Dams, Task Committee on Overtopping Protection of the Hydraulics Division of the American Society of Civil Engineers, (Noel R.(Randy) Oswalt, chmn.), 1994, 0-7844-0004-0, 140pp.
- Comparison of Headcut Advance Testing and Soil Test Results, Gregory J. Hanson and Robinson. Kerry M., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p426-430.
- Energy Dissipation for a RCC Stepped Spillway, Charles E. Rice and Kem C. Kadavy, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p548-552.
- Estimation of Spillway Free Jet Trajectory Lengths, Peter J. Rae and Diana Hurdowar-Castro, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p421-425.
- Force and Pressure Measurements in Spillway Plunge Pools, Peter J. Rae, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p553-557.
- Hydraulic Design of Spillway Plunge Pool Linings, Peter J. Rae, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p396-400.
- Influence of a Sand Layer on Headcut Advance, Kerry M. Robinson and Gregory J. Hanson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p431-435.
- Jet Flow on Stepped Spillways, M. R. Chamani and N. Rajaratnam, HY Feb. 94, p254-259.
- Local Scour Potential for Large Bed Material with Shallow Tailwater Depth, Kwang-Ik Son and Gilberto E. Urroz, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1146-1150.

Riprap Criteria below Pipe Outlet, Mahmood Shafai-Bajestan and Maurice L. Albertson, HY Feb. 93, p181-200

Round Rock Dam, Outlet Works Modification, Bruce D. Feinberg, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p411-423

Self-Aerated Flows on Chutes and Spillways, H. Chanson,

HY Feb. 93, p220-243. Strengths and Weaknesses of Shallow Water Equations in Steep Open Channel Flow, R. C. Berger, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1257-1262.

Supercritical Flow Behind Chute Piers, Roger Reinauer and Willi H. Hager, HY Nov. 94, p1292-1308.

Unsteady Spillway Inlet Conditions at the Weatherford Water Supply Reservoir, Steven L. Barfuss, J. Paul Tullis and Stuart R. Wilson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p558-562.

Splicing Strength of Welded Steel Mesh in Concrete Bridge Decks, Bilal M. Ayyub, Naji Al-Mutairi and Peter Chang, ST Aug. 94, p2532-2546.

Splitting

Shear Connection in Haunched Composite Beams with Sloping Sides, Deric John Oehlers and Sung Moo Park, ST July 94, p2227-2232.

Sports

Harborside International Golf and Marina Facility, Frank L. Kudrna, Jr. and Richard P. Nugent, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p124-131.

Making an Olympic Stadium and a Baseball Park, Scott W. Braley and David P. Tabor, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p188-

Planes, Trains and the Games, John Prendergast, CE Aug. 94, p38-41.

Pregame Show, Paul Tarricone, CE Aug. 94, p34-37. Zero-Gravity Sports Centers, Patrick Collins, Takashi Fu-kuoka and Tsuyoshi Nishimura, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p504-513.

Spraying

Re-Repair of the Piedras Bridge in El Paso, Texas with a New Low Pressure Spray Applied Structural Repair Mortar System, Robert J. Gulyas and Robert Navarro, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p936-954.

Spread foundations

Addendums to the Prediction Package, Robert Gibbens, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p86-91.

Behavior Prediction for Spread Footings on Sand, Sujit K. Bhowmik, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p245-248.

CPT-Based Prediction of Footing Response, Paul W. Mayne, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p214-218.

Data and Prediction Request for the Spread Footing Prediction Event, Robert Gibbens and Jean-Louis Briaud, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M.

Gibbens, ed., 1994), p11-85.
Estimation of Spread-Footing Settlement on a Sand Subgrade, John S. Horvath, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p145-

Introduction, Albert F. DiMillio, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p4-10.

Load - Settlement Predictions for Spread Footing Event, Vincent Silvestri, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p141-144.

Load-Settlement Characteristics of Spread Footings, V. A. Diyaljee, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p249-252.

Predicted and Measured Behavior of Five Spread Footings on Sand, Geotechnical Special Publication No. 41, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994, 0-7844-0025-3, 230pp.

Predicted Load-Settlement Behavior of Spread Footings on Sand, Casan L. Sampaco, Loren R. Anderson, Joseph A. Sand, Casan L. Sampaco, Loren R. Ginerson, Sospin Caliendo, Abdel Agallouch, Hogan Chang, Chia-Ching Lin, Elhassan Elhassan, Kyle Gorder, Roger Greaves, Makarand S. Jakate, Won C. Kim, Arthur L. Moss and Darrin Sjoblom, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p232-235.

Predicting the Settlement of the Texas A&M Spread Foot-ings on Sand, G. Wiseman and J. G. Zeitlen, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens,

ed., 1994), p129-132.

Prediction of Foundation Load/Settlement Characteristics, John Scott and Keith Nicholls, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p177-

Prediction of Settlement of Footings on Sand, G. Mesri and M. Shahien, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p188-191.

Prediction of Settlement of Spread Footings, Luciano Décourt, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p210-213.

Prediction of Vertical Load on Spread Foundations at Small and large Deflections, Richard J. Deschamps and Scott J. Ludlow, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p202-205.

Predictions of Footing Tests Sponsored by the FHWA Using a Strain Hardening Elastoplastic Constitutive Model, I. Shahrour and M. Zaher, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p224-227.

Settlement '94, Franco Ariemma, Avtar S. Vasu, Fred Agostino and Judith S. Doyle, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p192-

Settlement of Spread Footings on Granular Soil, Chandra S. Brahma, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p160-163.

Settlement of Test Footings: Predictions from the University of New Mexico, Koon Meng Chua, Ling Xu, Eric Pease and Sameer Tamare, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p240-

Settlement Prediction of Spread Footing Based on Laboratory Test Results, Mohammed S. A. Siddiquee, Tadatsugu Tanaka and Fumio Tatsuoka, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p137-140.

Settlement Predictions Footing Load Tests on Sand, Ken-neth E. Tand and Pickett Warden, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994),

Settlement Predictions Footing Load Tests on Sand, Erik Funegard and Pickett Warden, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p199-

Spread Footing Prediction Event, Ching L. Kuo and Sayed M. Sayed, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p219-223.

Spread Footing Prediction Event at the National Geotechnical Experimentation Site on the Texas A&M University Riverside Campus, David Thomas, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p149-152.

Spread Footing Predictions, Kuo-Hsia Chang, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens,

ed., 1994), p157-159.

Spread Footing Settlement Prediction, Carsten H. Floess, (Predicted and Measured Behavior of Five Spread Foot-ings on Sand, Jean-Louis Briaud, ed. and Robert M.

Gibbens, ed., 1994), p164-167.

Spread Footing Settlement Prediction for ASCE Specialty Conference "SETTLEMENT '94", Jon R. Foshee, (Pre-dicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens,

ed., 1994), p186-187.

Spread Footing Settlement Prediction for the National Geotechnical Experimentation Site Prediction Event: Settlement '94, P. Cooksey, Q. Tang, M. Zhao, M. Mauldon and E. Drumm, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p173-176.

Test and Prediction Results for Five Large Spread Footings on Sand, Jean-Louis Briaud and Robert Gibbens, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens,

ed., 1994), p92-128.

Test and Prediction Results for Five Spread Footings on Sand, Jean-Louis Briaud and Robert M. Gibbens, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1897-1898.

UF Spread Footing Prediction, F. C. Townsend, P. Ruesta and R. Morgan, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p182-185.

Computerized Building Settlement Analyses for a Contam-inated Groundwater Remediation Project, James A. McKelvey, III, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1228-1235.

Microcomputer-Aided Analysis and Design of Spandrel Concrete Beams Subjected to Combined Bending and Torsional Loads, Nadar Ghafoori and Jeffrey Bucholc, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1711-1718.

Software Interface in Engineering Applications, Charles E. Bowler, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1880-1883.

Springs, elastic

Cable Systems with Elastic Supporting Elements, James W. Charland, Alan G. Hernried and Marvin R. Pyles, ST Dec. 94, p3649-3665.

Sprinkler irrigation

Analysis and Design of Sprinkler Irrigation Laterals, Helmi M. Hathoot, Hussein M. Abo-Ghobar, Ahmed I. Al-Amoud and Fawzi S. Mohammad, IR May/June 94, p534-549.

Sediment and Debris Removal Inlet Structure for Canal Pipelines, Gilbert Horrocks, H. Lee Wimmer and Pam

McMullin, IR May/June 94, p607-616.

Wastewater Reclamation at Davenport, Washington, Douglas L. Smith, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p834-837.

Buckling Strength of Wood Power Poles Using Finite Elements, A. B. Peabody and J. W. Wekezer, ST June 94,

p1893-1908.

- Cementing Action in Non-Portland Cement Systems: Sul pho-Pozzolanic and Silico-Pozzolanic Reactivity, R. T. Hemmings and E. E. Berry, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p329-336.

 Column Design in Steel Frames under Gravity Loads,
- Oscar de Buen, ST Oct. 92, p2928-2935.

Computer Model Pointing to Dynamic Instability of Lift Slab Structure, Rusk Masih, (Computing in Civil Engi-neering, Khalil Khozeimeh, ed., 1994), p1832-1838.

Creep Effects on Static and Cyclic Instability of Granular Soils, Poul V. Lade, GT Feb. 94, p404-419.

Design Relationship for Filters in Bed Protection, K. J. Bakker, H. J. Verheij and M. B. de Groot, HY Sept. 94,

Drained Residual Strength of Cohesive Soils, Timothy D. Stark and Hisham T. Eid, GT May 94, p856-871

Dynamic Behavior of Nonlinear Cable System. III, Dan M. Ghiocel and Dario A. Gasparini, EM Dec. 94, p2694-2712.

The Effect of Mobile Transporter Motion on the Space Station Attitude Control System, Tsay-Hsin G. Hu, Jalal Mapar and Ben C. Barker, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p453-462. Elasto - Plastic Analysis of Cable Net Structures, J. L.

Meek, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba,

ed., 1994), p781-790.

Elasto-Plastic Buckling Design for Shallow Cylindrical Shells under External Pressure, Seishi Yamada and James G. A. Croll, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p936-945.

Estimating Basal-Heave Stability for Braced Excavations in Soft Clay, A. T. C. Goh, GT Aug. 94, p1430-1436.

Evaluations and Revisions of the Design, F. Abecasis and C. Pita, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p302-326. Expert System for Bridge Scour and Stream Stability,

Suzanne Pollon, Lea Adams, Richard Palmer and George Turkiyyah, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1389-1396.

Field Performance and Analysis of Steep Riprap. Guy Lefebvre, Karol Rohan, Mahrez Ben Belfadhel and Oscar Dascal, GT Sept. 92, p1431-1448.

Finite Element Limit Load Analysis by the Static Approach Using Nonlinear Programming, Hichem Smaoui, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1936-1943.

Free-Surface Instability in Flow down Steep Rivers, Cheng-lung Chen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

p1264.

A Generalized Approach to the Local Stability of Stiffened Plates: Part I-Mathematical Formulation, Osama Bedair and Archibald Sherbourne, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1526-1531

How to Optimize Frames Using Plastic Design Concept, Shahram Pezeshk, (Analysis and Computation, Franklin

Y. Cheng, ed., 1994), p113-122.

Hydrodynamics of Mining Pits in Erodible Bed under Steady Flow, Mohammad Akram Gill, HY Nov. 94, p1337-1348.

Influence of Wave Groups on Stability of Berm Breakwaters, Kevin R. Hall, WW Nov./Dec. 94, p630-636. Instability of Sandbars in Grand Canyon, Muniram Budhu

and Roger Gobin, HY Aug. 94, p919-933. K-Factor for Columns in any Type of Construction: Non-paradoxical Approach, J. Dario Aristizabal-Ochoa, ST Apr. 94, p1272-1290.

Lacey Divergence Equations for Alluvial-Canal Design, S. V. Chitale, HY Nov. 94, p1320-1326.

Local Buckling by Complex Finite Strip Method Using Bubble Functions, Mojtaba Azhari and Mark Andrew

Bradford, EM Jan. 94, p43-57. Lower Bounds for Overall Buckling of Spherical Space Domes, M. Kashani and J. G. A. Croll, EM May 94, p949-970.

Momentum and Energy Coefficients Based on Power-Law Velocity Profile, Cheng-lung Chen, HY Nov. 92, p1571-1584.

Nonlinear Analysis of Space Trusses, Erling Murtha-Smith, ST Sept. 94, p2717-2736.

Nonlinear Buckling Response of Single Layer Latticed Barrel Vaults, Seishi Yamada and Takashi Taguchi, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p519-528.

Nonlinear Stability of Differential Surge Chambers, Xiao-Liang Yang and Chen-Shan Kung, HY Nov. 92, p1526-1539

Notional-Load Plastic-Hinge Method for Frame Design, J. Y. Richard Liew, D. W. White and W. F. Chen, ST May 94, p1434-1454.

Numerical Experiments on Instability in Unsteady Flow Modeling, Chin-lien Yen and Ming-hsi Hsu, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1275-1279.

Optimization Procedure for Design of High-Speed Prop-Rotors, Aditi Chattopadhyay and Johnny R. Narayan,

AS Apr. 94, p143-155

Practical Second-Order Inelastic Analysis of Semirigid Frames, W. S. King and W. F. Chen, ST July 94, p2156-

A Self-Balancing Laminate, Jozsef Bodig, Robert T. Brooks and Allan G. Burk, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p689-694.

Shallow Tunnels in Cohesionless Soil: Stability of Tunnel Face, Pierre Chambon and Jean-François Corté, GT July 94, p1148-1165.

Stability Analysis for Multilayered Rubble Bases, Wojciech Sulisz, WW May/June 94, p269-282.

Stability and Wave Transmission at Low-Crested Rubble-Mound Structures, Jentsje W. van der Meer and Ivar F. R. Daemen, WW Jan./Feb. 94, p1-19.

Stability of Active-Tendon Structural Control with Time Delay, L. Zhang, C. Y. Yang, M. J. Chajes and A. H-D. Cheng, EM May 93, p1017-1024.

Stability of Columns under Uniform Axial Load with Semirigid Connections, J. Dario Aristizabal-Ochoa, ST Nov. 94, p3212-3222.

Stability of Lift Slab Structure During Construction Stage, Rusk Masih, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p271-277.

Stability Principle of Critical Flow Depth in a Moving Coordinate System, Cheng-lung Chen, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1263.

Stability Theory of Cohesive Crack Model, Yuan N. Li and Robert Y. Liang, EM Mar. 92, p587-603.

Steady-State Analysis of Buckle Propagation, André Nogueira and John L. Tassoulas, (Structures Congress XII, Baker, ed. and Barry J. Loodno, ed., 1994), p1514-1519.

Steady-State Oscillation of Hysteretic Differential Model. II: Performance Analysis, C. W. Wong, Y. Q. Ni and J. M. Ko, EM Nov. 94, p2299-2325.

ed. and Celina U. Penalba, ed., 1994), p383-392.

Thermal and Seismic Impacts on the North Ramp at Yucca Mountain, M. Lin, M. P. Hardy and J. Jung, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1971-1978.

Towards Robust, Effective and Efficient Second Order Analysis of Practical Steel Frames, S. L. Chan, Z. W. Zhou and W. F. Chen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1173-1178.

Ultimate Loading Capacity of Braced Domes, X. Chen, N. Wang and S. Z. Shen, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p539-546.

Ultimate Strength of R/C Cooling Tower Shell, Takashi Hara, Shiro Kato and Hiroshi Nakamura, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p877-886.

Unbound Drainable Base Courses: Permeability Versus Unsurfaced Stability, Reed B. Freeman and Gary I. Anderton, (Infrastructure: New Materials and Methods

of Repair, Kim D. Basham, ed., 1994), p685-692.
Water-Level Control in Hydropower Plants, Oscar F.
Jiménez and M. Hanif Chaudhry, EY Dec. 92, p180-193.

Wave Transformation and Load Reduction Using a Small Tandem Reef Breakwater - Physical Model Tests, Andrew Cornett, Etienne Mansard and Edgar Funke, (Ocean Wave Measurement and Analysis, Orville T. ed. and J. Michael Hemsley, ed., 1994), p1008-1023.

Stability analysis

Buckling of Single Layer Latticed Dome under Uniform Gravity Load, Masumi Fujimoto, Katsuhiko Imai and Toshitsugu Saka, (Spatial, Lattice and Tension Struc-tures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p509-518.

Classification of Semi-Rigid Connections Based on the Elastic-Plastic Mechanical Behavior of Frames, Yoshiaki Goto, Satoshi Miyashita and Wai-Fah Chen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p1191-1196.

Discrete Field Stability Analysis of X-Braced Lattices, Raja R. A. Issa and R. Richard Avent, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p450-459.

Dynamic Analysis of Unstable Structural Systems With Prescribed Velocities, Ken-ichi Miyazaki, Yasuhiko Hangai and Ken-ichi Kawaguchi, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p239-248.

Elastic Critical Loads for Plane Frames by Transfer Matrix Method, Stavros Syngellakis and Esmat S. Kameshki, ST

Apr. 94, p1140-1157.

Equations for Tapered Thin-Walled Beams of Generic Open Section, Sundaramoorthy Rajasekaran, EM Aug. 94, p1607-1629.

Finite Element Analysis of Thin-Walled Curved Beams Made of Composites, G. S. Palani and Sundaramoorthy Rajasekaran, ST Aug. 92, p2039-2062.

Imperfections and Thin-Walled Bars Behaviour, J. B. Obrebski and M. E. El-Awadi, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p310-319.

Inelastic and Stability Anlysis of Flexibly Connected Steel Frames by Springs-in-Series Model, C. Y. Yau and S. L. Chan, ST Oct. 94, p2803-2819.

Instability of Tapered Thin-Walled Beams of Generic Sec-Sundaramoorthy Rajasekaran, EM Aug. 94, p1630-1640.

Long Term Stability of Natural Glasses, Vladimír Knob-loch and Lumír Nachmilner, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1066-1068.

Nonlinear Analysis of Stiffened Laminated Cylindrical Shells Using the Layerwise Theory of Reddy, M. Savoia and J. N. Reddy, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p127-136.

Slenderness K factor for Leaning Columns, J. Dario Aristizabal-Ochoa, ST Oct. 94, p2977-2991.

Stability Analysis of Optimal Active Control Systems with Time-Delay and Other Influence Parameters, Franklin Y. Cheng and Peter Tian, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p286-295.

Stability Analysis of Rayleigh-Benard Convection in the

Presence of Side Walls, P. Diplas and C. Dietz, (*Hydraulic Engineering* '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p82-86.

Stability Analysis of Stiffened Plates and Shells, U. Jäppelt and H. Rothert, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p917-926.

A Study on Buckling Characteristics of Single-Layer Latticed Domes with the Initial Geometrical Imperfection, Hwan-Mok Jung, Young-Hwan Kwon and Moon-Myung Kang, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p489-498.

Theoretical study of unstable waves in the rapids of the river, H. Kyotoh, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1265-1269.

Undrained Shear Strength of Liquefied Sands for Stability Analysis, Timothy D. Stark and Gholamreza Mesri, GT Nov. 92, p1727-1747.

Unified Formulation for Analysis of Slopes with General Slip Surface, R. D. Espinoza, P. L. Bourdeau and B. Muhunthan, GT July 94, p1185-1204.

Stability criteria

Intelligent Decision Support System for Stage Discharge Analysis, Slobodan P. Simonovic, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p283-286.

Stabilization

Advanced Concepts in Cement Solidification and Stabilization Technology, D. L. Cocke, M. Y. A. Mollah, T. R. Hess and R. K. Vempati, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p614-615.

Analysis of Bayed Beaches in Static Equilibrium, Soon-Keat Tan and Yee-Meng Chiew, WW Mar./Apr. 94,

p145-153.

Assessment and Recommendations for the Enhancement of the Bardawil Lagoon Outlets, Alfy M. Fanos, Ahmed A. the Bardawii Lagoon Outets, Arry M. Panos, Anned A. Khafayg, Mohamed N. Anwar and Mary G. Naffaa, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p189-

Bender Park Development Milwaukee County, Wisconsin, Rob Montgomery, Barry Murray and Paul Hathaway, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p460-469.

Channel Stabilization and Retrofit, Ken Nilsen, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p718-

Characterization and Use of Fluidized-Bed-Combustion Coal Ash, Christina B. Behr-Andres and Neil J. Hutzler, EE Nov./Dec. 94, p1488-1506.

Coastal Groins and Nearshore Breakwaters, U.S. Army Corps of Engineers, 1994, 0-87262-998-8, 90pp.

Gully Potential in Soil-Covered Uranium Waste Impoundments, Steven R. Abt, Christopher J. Pauley, Scott A. Hogan and Terry L. Johnson, EY Aug. 94, p51-66. Immobilization of Heavy Metals in Cementitious Matrix, J.

Tritthart, F. D. Tamas, M. Patkai-Horvath and E. Zinterl, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p614.

Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), pol-4.

New Method for Stabilizing Phosphatic Clay by Using
Lime Columns, NE July 94, p16.

New Way to Stabilize Clay, ET Aug./Sept. 94, p11.

Permeability Behavior of a Water Treatment Sludge, M. C.

Wang and W. Tseng, GT Oct. 93, p1672-1677.

Signatical Cells Visilia. Survey Beach to Street. Space Exp.

Simplified Soil-Nailing System Ready to Stanch Steep Embankments, ET Oct./Nov. 94, p8.

Stabilization and Expansion of Historic Navy Pier, Patrick M. Doher and Bernard J. Fekete, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred

A. Klancnik, ed., 1994), p300-310.

The Structural History of the Jacob Bachmann Tavern, Jack R. Kayser and Kristina Lammi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p1570.

Thermoplastic Stabilization of MSW Combustor Ash, Vincent T. Breslin and Shawn E. Tisdell, EE Jan./Feb. 94, p154-168.

Wando Terminal Ground Improvement Program, James Drew Hussin and Forrest Foshee, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1416-1425.

Columnless in Chicago, Daniel A. Cuoco, Udom Hungspruke and Robert P. DeScenza, CE Nov. 94, p42-

Combinatary Net-Shell Roofs of Elliptic Paraboloid of Zhaoqing Gymnasium, Fa-Kun Yao, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p642-651.

Deep Dig, Tight Squeeze, Joseph C. Clougherty, Richard F. O'Brien and Mark W. Pelletier, CE Aug. 94, p42-45. A Design for a Football Stadium Roof Enabling Growth of

Design for a Powtonal Statuum Roof Enabung Grown on a Natural Grass Playing Surface: Sydney Football Stadium - Australia, G. S. Ramaswamy, D. S. Thomas, I. Norie and L. Thorogood, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p.28-37.

A League of Their Own, Paul Tarricone, CE May 94, p58-

Making an Olympic Stadium and a Baseball Park, Scott W. Braley and David P. Tabor, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p188-

Project Case Study: Space Frame Roof Structure, Main Stadium, Shah Alam Sport Complex, Selangor, Malaysia, James A. Moses, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p377-382.

Roofless in Seattle, CE Sept. 94, p8.

Stainless steel

A Dome For the 21st Century, John Zils, Mark Sarkisian and Ahmad Abdelrazaq, CE Feb. 94, p36-39.

Shaffer, Thomas F. R. Winston Revie and Anita Mandal, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p696-704.

Standard penetration tests
Behavior Prediction for Spread Footings on Sand, Sujit K. Bhowmik, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p245-248.

Estimation of Settlements of Shallow Foundations, M. Surendra, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p153-156. Liquefaction-Induced Damage to Buildings in 1990 Luzon

Earthquake, Kohji Tokimatsu, Hisaya Kojima, Shinichi Kuwayama, Akio Abe and Saburoh Midorikawa, GT

Feb. 94, p290-307.

Prediction of Foundation Load/Settlement Characteristics, John Scott and Keith Nicholls, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p177-181

Predictions of Shallow Foundation Behavior for Settlement '94, Storer J. Boone, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p168-172

Seismic Liquefaction Potential Assessed by Neural Net-works, Anthony T. C. Goh, GT Sept. 94, p1467-1480. Settlement of Shallow Foundations on Sand, Harvey E.

Wahls and Mukesh Gupta, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p190-206.

Settlement Predictions Footing Load Tests on Sand, Kenneth E. Tand and Pickett Warden, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p196-198.

Site Investigation Surveys for Dredging Projects, S. J. Plasman and J. Peuchen, (*Dredging '94*, E. Clark McNair,

Jr., ed., 1994), p322-331.

Spread Footing Settlement Prediction, Carsten H. Floess, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p164-167.

Standardization

Defining and Using Reference Evapotranspiration, George H. Hargreaves, IR Nov./Dec. 94, p1132-1139.

Developing Standardized Connection Analysis Techniques for Slim Hole Core Rod Designs, Gregory Fehr and Edmond I. Bailey, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1048-1054.

Effective Project Planning Techniques, Christian A. Jensen, CE Feb. 94, p66-67.

Evaluation Framework for IVHS, Hong K. Lo, Arun Chatterjee, Frederick Wegmann, Stephen Richards and Ajay K. Rathi, TE May/June 94, p447-460.

632

Quality Assurance and Quality Control for Pavement Management in Florida, Bruce T. Dietrich and W. Virgil Ping, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1034-1041.

Setting up CADD Right, Susanna C. Smith, CC May 94,

Standardizing Wind Measurements for Documentation of Surface Wind Fields in Hurricane Andrew, Mark D. Powell, Samuel H. Houston and Timothy A. Reinhold, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p52-69.

Standards

Achieving Adequate BMP's for Stormwater Quality Management, Anne Jones-Lee and G. Fred Lee, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p524-531.

Approximate Formulas for Effective Length of Steel Columns, A. Gordon Smyrell, ST Sept. 94, p2793-2801.

ASCE Standard 7-88 for Wind Loads is Mandated for New Mobile Homes, NE Feb. 94, p2.

Clarifier Enhancements Yield Excellent Performance, Cindy L. Wallis-Lage and David B. Hunt, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p194-201.

Codification of Wind-Pressure Coefficients for Multispan Gable Roofs, Theodore Stathopoulos and Patrick Saathoff, ST Aug. 94, p2495-2519.

Computer-Controlled, Precision Pressure Standard, Othon K. Rediniotis, (Fundamentals and Advancements Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p509-518.

Conceptual Models of Product, Project and Document Data; Essential Ingredients of CIC, Bo-Christer Björk, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p980-987.

The Development of a Wave Data Analysis Standard for a National Wave Measurement Program, Michael Tub-man, Marshall Earle and David McGehee, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p547-553.

Dredging Desk Reference: Accomplishments and Future Developments, Thomas M. Verna and Lyle J. Ma-ciejewski, (*Dredging '94*, E. Clark McNair, Jr., ed.,

1994), p170-179.

EDI and Its Role in Information Management, G. Edward Gibson, Jr., Lansford C. Bell and Clarisse Molad, (Computing in Civil Engineering, Khalil Khozeimeh, ed.,

1994), p1798-1805.

Effects of Policy and Other Changes on Transuranic Waste Disposal at WIPP, Robert H. Neill and Lokesh Chaturvedi, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p280-284.

EPA's Public Consultation and Communications Needs Assesment for its WIPP Outreach Program, Amy M. Newman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p88-91.

Federal Safety Standard for Mobile Homes Goes into Effect; ASCE Standard is Basis for New Rule, NE Aug.

Gypsum Plant Registers Under ISO, CE Dec. 94, p8.

A Health Risk Based Approach for HLW Repository Envi-ronmental Protection Criteria, R. F. Williams, R. L. Yang, R. McGuire and R. E. Wilems, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p1435-1450.

How to Organize CADD Systems (Part 1), CC Jan. 94,

p10-11

How to Organize CADD Systems (Part 2), CC Mar. 94, p8-10.

How to Organize CADD Systems (Part 3), John Voeller, CC Apr. 94, p6-7.

The IAEA's High Level Radioactive Waste Management Programme, D. E. Saire, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2279-2283.

Increasing the Credibility of Scientific Analyses, Thomas A. Cotton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p296-300.

Limitations on Scientific Prediction and How They Could Affect Repository Licensing, Richard A. Van Konynenburg, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

Mineral Admixtures in Cements for General Use and Spe-cial Purposes, Harold Roper, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p236-242.

Minimum Design Loads for Buildings and Other Structures (ASCE 7-93), Revision of ANSI/ASCE 7-88 (St No. 93-007), American Society of Civil Engineers, 1994,

0-87262-904-X, 135pp.

Mobile Homes Will Stand and Deliver, CE Mar. 94, p8. Modeling Engineering Design Information: An Object-Centered Approach, M. Maher Hakim and James H. Garrett, Jr., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p563-570.

Perspectives on Water Quality Regulation, J. David Holm, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed.,

1994), p145-154.

Preface and Executive Summary, Howard Holme, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p1-14.

Proposed Hurricane Wind Speeds for ASCE 7-95, Jon A Peterka and Kishor Mehta, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p461-466.

Punching Shear Strength of Steel Fiber Reinforced Concrete Slabs, Kiang-Hwee Tan and P. Paramasivam, MT May 94, p240-253.

Purpose and Perspective for the Conference: "National Water Resources Regulation - Where is the Pendulum Now?", Jonathan E. Jones, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p15-19.

Recommendations for Standards in Hydraulics, Task Committee on Recommendations for Standards in Hydraulics of the Hydraulics Division of the American Society of Civil Engineers, (George Hecker, chmn.), 1994, 0-

87262-971-6, 170pp.

Redefining the Roles Insurers and Engineers Play in Hurricane Preparedness and Mitigation, Eugene L. Lecomte, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p1-9.

Sand Filter Backwast Pit Criticality Analysis, Hans Toffer and David G. Erickson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p907-912.

Site Characterization Plan Thermal Goals Reevaluation, Steven F. Saterlie and J. C. de la Garza, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p882-889.

Small - Office CADD Implementation, M. Kevin Parfitt, CC Apr. 94, p14-15.

Standard for the Structural Design of Composite Slabs (ANSI/ASCE 3-91) Standard Practice for Construction and Inspection of Composite Slabs (ANSI/ASCE 9-91) (St No. 91-003, 91-009), American Society of Civil Engineers, 1994, 0-87262-954-6, 90pp.

Standard Guidelines for the Design of Urban Subsurface Drainage (ANSI/ASCE 12-92) Standard Guidelines for Installation of Urban Subsurface Drainage (ASCE 13-93) Standard Guidelines for Operation and Maintenance of Urban Subsurface Drainage (ASCE 14-93) (St No. 92-012, 93-013, 93-014), American Society of Civil Engineers, 1994, 0-87262-996-1, 60pp

Standards and Regulations for Geologic Disposal of High Level Waste: An Issues Framework, S. S. Sareen, S. J. Brocoum and T. A. Cotton, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p1393-1396.

Standards for High Level Radioactive Waste Repositories, Dade W. Moeller, Martin J. Steindler, Paul W. Pomeroy and William J. Hinze, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1417-1421.

Standards Processing 2000, Dana J. Vanier, J. Russell Thomas and Jamie L. Worling, (Computing in Civil En-gineering, Khalil Khozeimeh, ed., 1994), p137-144.

Tentative Provisions for the Development of Seismic Regulations for Buildings, Roland L. Sharpe, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p116-121.

U. S. NRC Staff Views on the Technical Bases for Yucca Mountain Standards, Margaret V. Federline, Janet P. Ko-tra and James R. Firth, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1422-1428.

Understanding ISO, Virginia Fairweather, CE Feb. 94,

Standing waves

Supercritical Flow Behind Chute Piers, Roger Reinauer and Willi H. Hager, HY Nov. 94, p1292-1308.

Wave Deformation in Front of Vertical Wall due to Wave Overtopping, Motohiko Umeyama, WW Sept./Oct. 94, p490-498.

Wave Run-Up and Reflection on a Permeable Sea Wall, Mitsuo Takezawa, Susumu Kubota and Shintaro Hotta, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p680-694.

State agencies

Breakout Session 2B: Transportation SIP Requirements, Mark Howard, Craig Leiner, Phil Lorang and John Suhrbier, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p142-144.

Colorado River Decision Support System, Larry Brazil and Ross Bethel, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p307-310.

Geographically Distributed Decision Support; The Tennes see Valley Authority (TVA) TERRA System, Rene F. Reitsma, Peter Ostrowski, Jr. and Stephen C. Wehrend, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

Grazing for Funding: Agency Hydrodiplomacy, C. M. Rogers and J. E. Robinson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p561-564.

Performance of Traffic Signals and Signs in Hurricane Andrew, Frances K. Ashley, Ronald A. Cook and Marc I. Hoit, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p415-423.

Water Reclamation Potential in Southern California to the Year 2010, Bahman Sheikh, (Water Policy and Manage-ment: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p661-664.

State government

ASCE to White House: Improve Flood Controls, CE Aug. 94, p96.

Clean Water Act Reauthorization: The States' Perspective, Roberta Haley Savage, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p34-52.

Contractor Must Register as Nonresident to Recover Payment, CE Sept. 94, p27.

Engineers Must Play Power Game of Politics, CE Nov. 94,

Rails Consolidated, Much to Homeowners' Delight, CE Apr. 94, p19.

State laws

Changes of Water Rights - The Colorado Experience, Joe Tom Wood, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p372-375.

Convergence and Divergence Between Regulated Riparian and Prior Appropriation Provisions in the ASCE Model State Water Rights Code, Ray Jay Davis, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p465-468.

Transbasin Diversions: Trends in State Legislation, George William Sherk, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuv-

el, ed., 1994), p537-540.

Uniform State Registration and Permitting For High-Level Radioactive Waste Transportation, James B. Reed, (High Level Radioactive Waste Management, High Level Ra-

dioactive Waste Program Committee, 1994), p158-162.
Water Transfer Law in Kansas, John C. Peck, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p279-282.

State planning

Breakout Session 2B: Transportation SIP Requirements, Mark Howard, Craig Leiner, Phil Lorang and John Suhrbier, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p142-144.

Implications of ISTEA and CAAA '90 for Transportation Planning Data Needs, Christopher Fleet and Charles Goodman, (Transportation Planning and Air Quality II. Thomas F. Wholly, ed., 1994), p76-94.

State-of-the-art reviews

Applying Dredged Material to Recreation Area Develop-ment, Russell K. Tillman and Thomas R. Patin, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p271-282.

California Housing Damage Related to Expansive Soils, Richard L. Meehan and Lawrence B. Karp, CF May 94,

p139-157.

Downdrag on Piles: Review and Recent Experimentation, John Anthony Little, (Vertical and Horizontal Deforma-tions of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1805-1826.

High-Strength Concrete Columns: State of the Knowledge, A. Azizinamini, P. Paultre and M. Saatcioglu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p444-449.

The History and Present Status of Microwave Aircraft, William C. Brown, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1482-1491.

Methods to Reduce the Settlement of Embankments on Soft Clay: A Review, Jean-Pierre Magnan, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p77-91.

An Overview of A.S.C.E. Manual 50 "Planning and Design Guidelines for Small Craft Harbors", Fred A. Klancnik, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p196-200.

Roadmap to Current Benchmarking Literature, Andrew E. Jackson, Robert R. Safford and William W. Swart, ME Nov./Dec. 94, p60-67.

Space Stations Past, Present, and Future, Keegan Kim-brough, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p837-841.

State-of-the-Art Report on Seismic Performance of Unreinforced Masonry Buildings, Michel Bruneau, ST Jan. 94, p230-251.

Structural Analysis of Pavements: State-of-the-Art, Yu T. Chou, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p958-963.

An Update on Dredge Instrumentation and Automation, Arie Korevaar, (Dredging '94, E. Clark McNair, Jr., ed.,

1994), p764-775.

The Use of By-Product Gypsum in Road Construction: a State-of-the-Art Summary, Ramzi Taha, Tom Papagian-nakis, Roger Seals and Donald Saylak, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p170-177.

Behavior of Cast-Iron Spillway Gate Wheels, Dimos Po-lyzois and Walter J. Muzyczka, MT Nov. 94, p495-512.

Cable Systems with Elastic Supporting Elements, James W. Charland, Alan G. Hernried and Marvin R. Pyles, ST Dec. 94, p3649-3665.

Design and Installation of a New Settlement-Inclinometer Device, R. G. Campanella, R. S. Jackson, J. A. R. Orti-gao and C. B. Crawford, (Vertical and Horizontal Defor-mations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p911-922.

Optimization for Earthquake Loads, Kevin Z. Truman and Franklin Y. Cheng, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p123-132.

Parameter Estimation of Structures from Static Response. II: Numerical Simulation Studies, M. R. Banan, M. R. Banan and K. D. Hjelmstad, ST Nov. 94, p3259-3283.

Parameter Estimation of Structures from Static Response. I: Computational Aspects, M. R. Banan, M. R. Banan and K. D. Hjelmstad, ST Nov. 94, p3243-3258.

Static structural analysis

Shear Effects on the Static Behaviour of Stiffened Pierced Walls, B. S. Choo and G. Q. Li, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1719-1726.

Static Response of Fiberglass Pretensioned Beams, Rajan Sen, Mohsen Issa, Zeying Sun and Mohsen Shahawy, ST Jan. 94, p252-268.

Static tests

Compaction of Lunar-Type Soil, Leonhard E. Bernold, AS Apr. 94, p175-187.

Determining Bituminous Pavement Shear Modulus, John E. Haddock and Thomas D. White, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p788-795.

One-Dimensional Shock and Quasi-Static Liquefaction of Silt and Sand, Jane M. Bolton, Deanna S. Durnford and Wayne A. Charlie, GT Oct. 94, p1874-1889.

A Computer-Integrated Approach to Teaching Engineering Mechanics, Shahram E. Zanganeh and Robert E. Efimba, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1265-1272.

A Multimedia Learning Environment for Statics, Siegfried M. Holzer and Raul H. Andruet, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p308-314.

Statistical analysis

Assessing Nassau County's Water Conservation Program, Mark Maimone and Michael Labiak, WR Jan./Feb. 94, p90-100.

Bacterial Density Changes Across Sludge Disposal Facility, Ling Cheng, Bret Buras, D. M. Griffin, Jr. and James D. Nelson, EE Jan./Feb. 94, p138-153.

Bed-Load Sampling in Sand-Bed Rivers, Moustafa T. K. Gaweesh and Leo C. van Rijn, HY Dec. 94, p1364-1384.

Bromine Distribution Factors in THM Formation, Paul H. Hutton and Francis I. Chung, WR Jan./Feb. 94, p1-16.

Case Studies of Extreme Wave Analysis: A Comparative Analysis, Gerbrant van Vledder, Yoshimi Goda, Peter Hawkes, Etienne Mansard, Maria Jesus Martin, Martin Mathiesen, Eric Peltier and Edward Thompson, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p978-992.

Compression Strength of Pultruded Flat Sheet Material, J. T. Mottram, MT May 94, p185-200.

Dormancy and Nondormancy Alfalfa Yield and Evapotranspiration, J. C. Guitjens and M. T. Goodrich, IR Nov./Dec. 94, p1140-1146.

Effectiveness of Water-Conservation Measures in Greater Athens Area, Helen Briassoulis, WR Nov./Dec. 94,

Evaluating Methods for Statistical Analysis of Less than Detection Limit Data Using Simulated Small Samples 2. General Results, Joan U. Clarke, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p747-755.

Flow-Duration Curves I: New Interpretation and Confidence Intervals, Richard M. Vogel and Neil M. Fennessey, WR July/Aug. 94, p485-504.

Influence of Spatially Random Soil Stiffness on Foundation Settlements, Geoffrey M. Paice, D. V. Griffiths and Gordon A. Fenton, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p628-639.

Measured Total Wave Climate of a Small Craft Harbor, Chuck Mesa, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed.,

1994), p90-104.

Mulitlevel Model for Gage and Paleoflood Data, Ellen W. Stevens, WR July/Aug. 94, p444-457.

Mulitvariate Geostatistical Design of Ground-Water Monitoring Networks, Fethi Ben-Jemaa, Miguel A. Mariño and Hugo A. Loaiciga, WR July/Aug. 94, p505-522.

Optimization of Curing of Silica Fume Concrete, Mohammad Shamim Khan and Michael E. Ayers, (Infrastruc-ture: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p820-827.

Optimum Number of Specimens for Low-Cycle Fatigue Tests of Concrete, Todorka Paskova and Christian Meyer, ST July 94, p2242-2247.

Orthogonal Series Expansions of Random Fields in Relia-bility Analysis, Jun Zhang and Bruce Ellingwood, EM Dec. 94, p2660-2677.

Performance Evaluation of Crumb-Rubber Modified As-Phalt Interlayers, Olga Pendleton and Cindy Estakhri, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p441-448.

Recovery of Chromium from Spent Plating Solutions by a Chromyl Chloride Process, Subbarao L. Guddati, Thomas M. Holsen and J. Robert Selman, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p241-248.

Satellite Observations of Wave Heights in Arabian Sea and Bay of Bengal, Usha Natesan and S. P. Subramanian, WW Nov./Dec. 94, p576-579.

Station-Year Approach: Tool for Estimation of Design Floods, Henri Garros-Berthet, WR Mar./Apr. 94, p135-

A Statistical Analysis of Wind Damage to Single-Family Dwellings Due to Hurricane Hugo, Serji Amirkhanian, Peter Sparks and Sandy Watford, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1042-1047.

Statistical Considerations on Large-Scale Geomechanics Test Design For Nuclear Waste Repository Characterization, Kunsoo Kim and Hang Gao, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1922-1929.

Statistical Techniques for Assessing Water-Quality Effects of BMPs, John F. Walker, IR Mar./Apr. 94, p334-347.

Statistically-Based Evaluation of Homes Damaged by Hur ricanes Andrew and Iniki, Jay H. Crandell, Mark T. Gibson, Edward M. Laatsch, Mark S. Nowak and J. Albert vanOvereem, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p519-528.

Structuring Category Analysis Using Statistical Technique, V. R. Rengaraju and M. Satyakumar, TE Nov./Dec. 94,

p930-939.

Traffic Safety Research: Database Issues and Analysis Techniques, Yusuf M. Mohamedshah and Charles C. Liu, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1846-1853.

Uplift Load-Displacement Behavior of Grillage Founda-tions, Fred H. Kulhawy and Harry E. Stewart, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p233-244.

Point-Estimate Method for Calculating Statistical Moments, K. S. Li, EM July 92, p1506-1511.

TIGER and Census Bureau Data in a GIS: A Powerful Combination for Civil Engineers, Robert W. Marx, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p225-232.

Statistical models

Alabama DOT Implementation of Hot Mix Asphalt QC/QA Procedures, Frazier Parker, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1026-1033.

Bidding Model for Refurbishment Work, Teo Ho Pin and W. F. Scott, CO June 94, p257-273. Effects of Crumb Rubber Type and Content on Performance Related Properties of Asphalt Binders, H. U. Bahia and R. Davies, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p449-

Life Prediction of Materials/Systems of Transportation In-frastructure, K. P. George, (Infrastructure: New Materi-als and Methods of Repair, Kim D. Basham, ed., 1994), p1081-1088.

Statistical sampling

Statistical Quality Control and Assurance in Bituminous Materials, Y. J. Chou and W. V. Ping, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1051-1058.

Statistical Sample Size for Construction of Soil Liners, Craig H. Benson, Huaming Zhai and Salwa M. Rashad, GT Oct. 94, p1704-1724.

Statistics

1988 Armenia Earthquake. II: Damage Statistics Versus Geologic and Soil Profiles, M. K. Yegian, V. G. Ghahraman and G. Gazetas, GT Jan. 94, p21-45.

A Comparison of Wave Statistics in Uni- and Multidirec-tional Shoaling Seas, Andrew M. Cornett and Okey G. Nwogu, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994),

p458-473.

Design Waves and Wave Spectra for Engineering Applications, Chung-Chu Teng, Gerald L. Timpe, Ian M. Palao and David A. Brown, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hems-ley, ed., 1994), p993-1007.

Development of Stochastic Indicator Models of Lithology, Yucca Mountain, Nevada, Christopher A. Rautman and Thomas H. Robey, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Com-

mittee, 1994), p2510-2519.

Estimating Autocovariance of In-Situ Soil Properties, Don J. DeGroot and Gregory B. Baecher, GT Jan. 93, p147-166

Geostatistics for Fracture Characterization, R. Mohan Srivastava and Bruce M. Davis, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p2131-2138.

Improving Subsurface Characterization and Prediction of Contaminant Transport, Salwa Rashad and Craig H. Benson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p277-281

Modeling Fracture in Cemented Granular Materials, B. C. Trent and L. G. Margolin, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and

Robert Y. Liang, ed., 1994), p54-69.

Nonlinear Effects on Wave Envelope and Phase, M. Aziz Tayfun, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p755-768

Nonlinearity in Wave Crest Statistics, David L. Kriebel and Thomas H. Dawson, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hems-

ley, ed., 1994), p61-75.

A Probabilistic Approach to Assessing Radioactive Waste Container Lifetimes, Fiona M. Porter, Chris C. Naish and Susan M. Sharland, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1008-1013.

PWR Axial Burnup Profile Database, R. J. Cacciapouti, S. Van Volkinburg and L. A. Hassler, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p739-743.

Statistical Response of a Class of Hysteretic Systems, I. I. Orabi and G. Ahmadi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p405-410. Wave Transformation and Load Reduction Using a Small Tandem Reef Breakwater - Physical Model Tests, An-drew Cornett, Etienne Mansard and Edgar Funke, (Ocean Wave Measurement and Analysis, Orville T. ed. and J. Michael Hemsley, ed., 1994), p1008-1023.

Application of the FESWMS-2DH Software to Solve the Navigation Problem at EL-Menya Bridge in Egypt, Khaled Kheireldin, Ahmed Fahmey and Mohamed G ser, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1244-1250. Combined Oscillatory and Steady Flow Over Ripples, K. I. Mahesha Ranasoma and John F. A. Sleath, WW July/

Aug. 94, p331-346.

HEC River Analysis System (HEC-RAS), Vernon Bonner, Gary Brunner and Mark Jensen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p376-380.

Improved Hydraulic Features of the HEC River Analysis (HEC-RAS), Gary W. Brunner and Steven S. Piper, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p502-506.

No-Choke Flow in Trapezoidal Channels, Subhasish Dey,

EM Oct. 94, p2224-2231.

Numerical Analysis of High Velocity Flow with Zero-Depth Line and Oblique Shock Wave in Steep Open-Depin Line and Oblique Shock wave in Steep Open-Channels, Takashi Hosoda and Nozomu Yoneyama, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1270-1274.

Steady state

Ambrose, R. B. T. S. Wu and S. C. McCutcheon, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p890-894.

Buckle Propagation: Steady-State Finite-Element Analysis, André C. Nogueira and John L. Tassoulas, EM Sept. 94,

p1931-1944

Comparison of Models for Subsurface Drainage in Flat and Sloping Lands, E. Lorre, B. Lesaffre and R. W. Skaggs, IR Mar./Apr. 94, p266-277.

Consolidation of Clay Layer: Hydrogeologic Boundary Conditions, Robert L. Schiffman, John M. McArthur and Robert E. Gibson, GT June 94, p1089-1093.

Hydraulic Age Distribution in Perfectly Mixed Non-Steady-State Reactors, Marcelo Juanico and Eran Friedler, EE Nov./Dec. 94, p1427-1445. Hydraulic Residence Time of CSTRs under Unsteady-State

Condition, Jian Peng, EE Nov./Dec. 94, p1446-1458. QUAL2E Simulations of Pulse Loads, Raymond Walton

and Mary Webb, EE Sept./Oct. 94, p1017-1031. Shakedown Analysis of Hollow Spheres, Wei Jiang, EM

July 94, p1447-1480. Steady-State Oscillation of Hysteretic Differential Model. I: Response Analysis, C. W. Wong, Y. Q. Ni and S. L. Lau, EM Nov. 94, p2271-2298.

Steady-State Oscillation of Hysteretic Differential Model. II: Performance Analysis, C. W. Wong, Y. Q. Ni and J. M. Ko, EM Nov. 94, p2299-2325.

Steady state models

Analysis of Biomass Distribution and Chemical Interactions in Nitrifying Biofilms, Edna M. C. V. Flora, Joseph R. V. Flora, Makram T. Suidan and Byung J. Kim, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p305-312.

Steam electric power generation Microworlds for Learning Through Inquiry, David McArthur, Matthew W. Lewis and Miriam Bishay, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1067-1074.

Aging Effect on Bond Strength in Composite Sections, Yasser M. Hunaiti, MT Nov. 94, p469-473.

AISC's Higgins Award Goes to Griffis, NE May 94, p14. AISI-FHWA Model Bridge Test, Mark Moore, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1065-1070.

Analytical Model for Steel-Jacketed RC Circular Bridge Columns, Y.H. Chai, M. J. N. Priestley and F. Seible, ST

Aug. 94, p2358-2376.

Application of High-Performance Steel in New and Retrofit Structures, Robert J. Dexter, Le-Wu Lu and John W. Fisher, (Infrastructure: New Materials and Methods

of Repair, Kim D. Basham, ed., 1994), p336-343.
Behavior of Deeply Corrugated Steel Plate in Culvert, Alan F. Rauch, Shad M. Sargand and Glenn A. Hazen, ST May 94, p1651-1655.

Calibration of Current Factors in LRFD for Steel, David V. Rosowsky, Ahmed F. Hassan and N. V. V. Phani Kumar, ST Sept. 94, p2737-2746. Carbon and Steel Microfiber-Reinforced Cement-Based

Composites for Thin Repairs, Nemkumar Banthia and Sylvie Dubeau, MT Feb. 94, p88-99.

Comparative Analysis of Bridge Superstructure Deteriora-tion, David Veshosky, Carl R. Beidleman, Gerald W. Buetow and Muge Demir, ST July 94, p2123-2136.

Composite Walls as Shear Elements in Tall Structures, Howard Wright, Anwar Hossain and Stewart Gallocher, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p140-145.

Construction of the Baytown Bridge, Houston, Man-Chung Tang, (Structures Congress XII, N. C. Baker, ed.

and Barry J. Loodno, ed., 1994), p666-671. Corrosion of HLW Carbon Steel Containers in the Vapor Phase of Salt Brines, E. Smailos, (High Level Radioactive Waste Management, High Level Radioactive Waste

Program Committee, 1994), p963-968.

Corrosion Scenario Development for Corrosion Lifetime Prediction of Carbon Steel Used for Geological Disposal Package, Takanori Fukuda, Guen Nakayama and Masatsune Akashi, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p977-983.

Creating Powder-Coatings Guidelines, ET Dec. 94/Jan. 95.

p10.

Creep Analysis of Composite Steel-Concrete Members with Deformable Connectors, F. Mola, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p737-742.

Creep Effects in Composite Beams with Flexible Shear Connectors, Angelo Marcello Tarantino and Luigino Dezi, ST Aug. 92, p2063-2081.

Creep in Composite Continuous Beams. II: Parametric Study, Luigino Dezi and Angelo Marcello Tarantino, ST

July 93, p2112-2133.

Cyclical Behavior of Welded Steel Shear Studs, Kurt Michael McMullin and Abolhassan Astaneh-Asl, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1024-1029. Debating Steel - Connection Design, Alexander Newman,

CE Feb. 94, p52-55.

Durability of Steel/Composites Bonds for Rehabilitation of Structural Components, Pierre E. Bourban, Steven H. McKnight, Stacy B. Shulley, Vistasp M. Karbhari and John W. Gillespie, Jr., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p295-302.

Flexural Strength of Profiled Beams, Deric J. Oehlers, Howard D. Wright and Matthew J. Burnet, ST Feb. 94,

Gateway to Columbus, John Hillman and Daniel K. Bur-

roughs, CE Dec. 94, p58-61.

Grout Repair of Dented Offshore Tubular Bracing-Experimental Behavior, James M. Ricles, Troy E. Gillum and William Lamport, ST July 94, p2086-2107

Heat-Straightening Repair of Damaged Steel, R. Richard Avent, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1194-1202.

High Performance Construction Materials and Systems: An Essential Program for America and Its Infrastructure -Technical Report, Report 93-5011, Civil Engineering Research Foundation, 1993, 0-87262-939-2, 205pp.

High-Performance Construction Materials and Systems: An Essential Program for America and Its Infrastructure Executive Report, Report 93-5011.E, Civil Engineering Research Foundation, 1993, 0-87262-938-4, 32pp.

Historical Considerations for New Jersey Viaduct, Dennis V. Brizick, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p302-307.

In Rehab We Trust, Benjamin Lavon, CE Sept. 94, p73-74.

Innovative Design of Steel Gable Frames, Thomas Sputo, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p337-342.

Load Carrying Capacity of SPC Composite Column, Toshiyuki Tanaka, Kazuo Inoue and Cheol-hwan Kim, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p827-832.

Long-Term Monitoring of Civil Structures using Smart Structures Techniques, T. Russell Gentry, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p1392-1402.

Material Condition of Underwater Fuel and Storage Equipment, A. P. Hoskins, J. G. Scott, C. V. Shelton-Davis and G. E. McDannel, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1117-1123.

Modeling of Cyclic Moment-Rotation Response of Double-Angle Connections, Mario De Stefano, Antonello De Luca and Abolhassan Astaneh-Asl, ST Jan. 94, p212-

220

636

Modified Roof Erection System, James D. Stevens and Alan L. Murray, CO Dec. 94, p828-837. Nonlinear Inelastic Analysis of Steel Beam-Columns I: Theory, Yong Lin Pi and N. S. Trahair, ST July 94, p2041-2061.

Nonlinear Inelastic Analysis of Steel Beam-Columns II: Applications, Yong Lin Pi and N. S. Trahair, ST July 94, p2062-2085.

The Normandie Bridge, Michel Virlogeux, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p660-665.

Performance Assessment of the Copper/Steel Canister, Pa-

rtik Sellin, Torsten Eng and Lars Werme, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1020-1029. Progress in Reinforced Concrete Column Design: An In troduction, S. Ali Mirza, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p429-431.

Seismic Performance of Steel-Encased Composite Columns, James M. Ricles and Shannon D. Paboojian, ST

Aug. 94, p2474-2494.

Seismic Retrofit of R/C Columns with Inadequate Lap Splices, R. S. Aboutaha, M. D. Engelhardt, J. O. Jirsa and M. E. Kreger, (Structures Congress XII, N. C Baker, ed. and Barry J. Loodno, ed., 1994), p1502-1507.

Seismic Strengthening of URM Buildings with Steel Brac-ing, Durgesh C. Rai, Subhash C. Goel and William T. Holmes, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p809-814.

Shear Connection in Haunched Composite Beams with Sloping Sides, Deric John Oehlers and Sung Moo Park,

ST July 94, p2227-2232.

Simplified Calculation Method for Force Transfer in Composite Columns, Jan A. Wium and Jean-Paul Lebet, ST Mar. 94, 9728-746.
Simplified Creep Analysis of Composite Beams with Flexi-

ble Connectors, Luigino Dezi, Carlo Ianni and Angelo Marcello Tarantino, ST May 93, p1484-1497.

Spanning the Grand Canyon, Jerry A. Cannon and Robert D. Turton, CE Nov. 94, p38-41.

Static Response of Fiberglass Pretensioned Beams, Rajan Sen, Mohsen Issa, Zeying Sun and Mohsen Shahawy, ST Jan. 94, p252-268.

Steel-Concrete Interaction by Means of Film Sensors, Marco di Prisco and Alessandro Gandelli, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p815-820.

Steel-Deck-Reinforced Concrete Diaphragms. I, W. Samuel Easterling and Max L. Porter, ST Feb. 94, p560-576.
Steel-Deck-Reinforced Concrete Diaphragms. II, W. Samuel Easterling and Max L. Porter, ST Feb. 94,

p577-596.

Stress and Strain in Curved Noncracked Concrete Members, Makoto Kawakami and Amin Ghali, ST Feb. 94, p527-537.

Structural Performance of a Multipurpose Canister Shell for HLNW Under Normal Handling Conditions, Samaan G. Ladkany and Rajkumar Rajagopalan, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p984-992. Surface Preparation of Steel for Adhesive Bonding in Rehabilitation Applications, Steven H. McKnight, Pierre E. Bourban, John W. Gillespie, Jr. and Vistasp M. Karbhari, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1148-1155.

The Tatara Bridge - World's Longest Cable-Stayed Span, Manabu Ito and Takeo Endo, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p677-682

Ultimate Resistance of Unstiffened Multiplanar Tubular TT- and KK-Joints, Joop C. Paul, Yuji Makino and Yoshiaki Kurobane, ST Oct. 94, p2853-2870.

Variation of Ductility Capacity of Steel Beam-Columns, Masayoshi Nakashima, ST July 94, p1941-1960.

Worldwide Calibration of API RP2A-LRFD, R. C. Turner, C. P. Ellinas and G. A. N. Thomas, WW Sept./Oct. 94, p423-433.

Steel beams

Acoustic Emission Monitoring of Fatigue Crack Growth in HSLA-80 Steel Box Beams, Stephen Pessiki and Steven Derrah, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1334-1339.

Cyclic Behavior of Joints Between Steel Beams and Reinforced Concrete Columns, Ryoichi Kanno and Gregory G. Deierlein, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1137-1142.

Design of Cantilever Steel Beams: Refined Approach, Hes-ham S. Essa and D. J. Laurie Kennedy, ST Sept. 94, p2623-2636.

Emergency Repairs for Storrow Drive Tunnel, Paul L. Kelley, (Infrastructure: New Materials and Methods of Re-pair, Kim D. Basham, ed., 1994), p1103-1110.

Fatigue Strength of Weathered Rolled Beam Made of A588 Steel, Pedro Albrecht and Camille Shabshab, MT

Aug. 94, p407-428.

Guidelines for Design of Joints between Steel Beams and Reinforced Concrete Columns, ASCE Task Committee on Design Criteria for Composite Structures in Steel and Concrete, ST Aug. 94, p2330-2357.

Lateral Buckling: A Comparison of AISC-LRFD and Eurocode 3, Reynaud L. Serrette, (Structures Congress XII. N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p333-

336.

Recent Developments in Seismic Response of Composite Structures, Bahram M. Shahrooz, David A. Kramer and Mark E. Remmetter, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p158-163.

Rigid Beam-To-Column Connection Detail for Circular Composite Columns, Atorod Azizinamini and Y. Shekar, (Structures Congress, XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1155-1160.

Application of Concrete-Filled Steel Tubular Columns in Tall Buildings in Earthquake Area, Chahg-Ji Gong, Xi Lin and Shao-Huai Cai, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p146-151.

Approximate Formulas for Effective Length of Steel Columns, A. Gordon Smyrell, ST Sept. 94, p2793-2801.

Design of Frames Using Notional Horizontal Force, S. Toma, J. Takamatsu and N. Nishihata, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1161-1166.

A Dome For the 21st Century, John Zils, Mark Sarkisian and Ahmad Abdelrazaq, CE Feb. 94, p36-39.

Fire Resistance of Circular Steel Columns Filled with Bar-Reinforced Concrete, T. T. Lie, ST May 94, p1489-

Fire Resistance of Concrete-Filled, Fire-Resistant Steel-Tube Columns, Y. Sakumoto, T. Okada, M. Yoshida and S. Tasaka, MT May 94, p169-184.

Fire Resistance of Fire-Resistant Steel Columns, Y. Sakumoto, T. Yamaguchi, T. Okada, M. Yoshida, S. Tasaka and H. Saito, ST Apr. 94, p1103-1121.

Steel construction

Aesthetic Considerations in the Design of a Stack Extension, Howard I. Epstein and George Torello, Jr., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1238-1243.

Lateral Bracing Criteria of the Composite Braces, Kazuo Inoue, Yasuo Higashibata and Kazuhiro Inoue, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p152-157.

Local Web Crippling of Unstiffened Multi-Cell Box Sections, Mark R. Kaczinski, Christopher R. Schneider. Robert J. Dexter and Le-Wu Lu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p343-348.

Steel fibers

Creep and Shrinkage Deflections of RC Beams with Steel Fibers, Kiang-Hwee Tan, P. Paramasivam and Kah-Chai Tan, MT Nov. 94, p474-494.

Dynamic Response of Steel Fiber Reinforced Concrete, David H. Sanders and Qiudong Wu, (Structures Con-gress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p833-838.

Flexural Analysis of Reinforced Concrete Beams Containing Steel Fibers, Byung Hwan Oh, ST Oct. 92, p2821-

Flexural Behavior of Simcon, David J. Akers and Ziad Bayasi, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p375-379

High Strength Shotcrete and Concrete on the SSC Project, Leon A. Berdugo, Prabir Das and C. J. Roth, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p761-766.

Punching Shear Strength of Steel Fiber Reinforced Concrete Slabs, Kiang-Hwee Tan and P. Paramasivam, MT May 94, p240-253.

Small Diameter Fibers/Micro Fibers for Reinforcement of Thin Sheet Products, Ziad Bayasi and Jack Zeng, (Infra-structure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p380-385.

Specimen Geometry and Toughness of Steel-Fiber-Reinforced Concrete, Lianrong Chen, Sidney Mindess and Dudley R. Morgan, MT Nov. 94, p529-541.

Steel-Fiber-Reinforced Wet-Mix Shotcrete: Comparisons with Cast Concrete, Nemkumar Banthia, Jean-François Trottier and Denis Beaupré, MT Aug. 94, p430-437

Structural Behavior of Polymer Concrete Beams Using Re-cycled Plastic, Karim S. Rebeiz, Sleiman P. Serhal and David W. Fowler, MT Feb. 94, p150-165.

Toughness Characterization of Steel-Fiber Reinforced Jean-Francois Trottier and Nemkumar Concrete. Banthia, MT May 94, p264-289.

The Use of High Performance Fiber Reinforced Cement Composites for Seismic Rehabilitation, Neven Krstulo-vic-Opara, Chia-Ming Uang and Abdol Haghayeghi, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p812-819.

Welded Wire Fabric for Bridges II.: Fatigue Strength, Bi-lal M. Ayyub, Peter C. Chang and Naji A. Al-Mutairi, ST June 94, p1882-1892.

Welded Wire Fabric for Bridges. I: Ultimate Strength and Ductility, Bilal M. Ayyub, Peter C. Chang and Naji A. Al-Mutairi, ST June 94, p1866-1881.

Behaviour of Concrete Masonry Infill - Steel Frame Structures, J. L. Dawe and C. K. Seah, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p67-76.

Column and Beam-Column Design - A World View, N. E. Shanmugam and W. F. Chen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1581-1586.

Column Design in Steel Frames under Gravity Loads, Oscar de Buen, ST Oct. 92, p2928-2935.

Cyclic Performance of Riveted Connections, Roberto Leon, Gabriel P. Forcier, Charles W. Roeder and F. Robert Preece, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1490-1495.

Debate Continues Over Steel-Weld Performance, CE Aug.

Design Implications of Advanced Analysis in LRFD, J. Y. Richard Liew and W. F. Chen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1167-1172. Design of Frames Using Notional Horizontal Force, S. Toma, J. Takamatsu and N. Nishihata, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1161-1166.

Elastic Critical Loads for Plane Frames by Transfer Matrix Method, Stavros Syngellakis and Esmat S. Kameshki, ST Apr. 94, p1140-1157.

Inelastic and Stability Anlysis of Flexibly Connected Steel Frames by Springs-in-Series Model, C. Y. Yau and S. L. Chan, ST Oct. 94, p2803-2819.

Chan, STOCt. 94, p.2803-2819.
Inelastic Link Element for EBF Seismic Analysis, James M. Ricles and Egor P. Popov, ST Feb. 94, p441-463.
Innovative Design of Steel Gable Frames, Thomas Sputo, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p337-342.
Nonlinear Analysis of Structural Frameworks Using Supercomputing Techniques, Christopher M. Foley and Sriramulu Vinnakota, (Computing in Civil Engineering,

Khalil Khozeimeh, ed., 1994), p2058-2065. Nonlinear Vibration Analysis of Steel Frames with Semirigid Connections, Siu Lai Chan and Goman Wai Ming

rigid Connections, Siu Lai Chan and Goman Wai Ming Ho, ST Apr. 94, p1075-1087.

A Nonlinear-Analysis-Based Procedure for Evaluating Load-Carrying Capacity of In-Plane Steel Frames, Fumio Nishino, Buntara S. Gan and Eiki Yamaguchi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1179-1184.

Notional-Load Plastic-Hinge Method for Frame Design, J. Y. Richard Liew, D. W. White and W. F. Chen, ST May 94, p1434, 1454.

94, p1434-1454.

A Peice-wise Linear Evaluation of Masonry Infills Subjected to Out-of-plane Seiesmic Drift, R. Craig Henderson, W. Dale Jones, E. G. Burdette and Max L. Porter, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p803-808.

Recent Studies of the Behaviour of Semi-Rigid Composite

Connections, David A. Nethercot and Riccardo Zan-donini, (Structures Congress XII. N. C. Baker, ed. and

Barry J. Loodno, ed., 1994), p1143-1148. Seismic Behavior of Open-Web Truss-Moment Frames,

Subhash C. Goel and Ahmad M. Itani, ST June 94,

p1763-1780. Seismic Behavior of Type PR Steel Frames, K. S. Sivakumaran and Sanjiang Chen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p585-590.

Seismic Fragility Analysis of Sheahan Pumping Building, Howard H. M. Hwang, Ah Lim Ch'ng and Hui-Mi Hsu, (Structures Congress XII, N. C. Baker, ed. and Barry J.

Loodno, ed., 1994), p1006-1011.

Seismic-Resistant Special Truss-Moment Frames, Subhash C. Goel and Ahmad M. Itani, ST June 94, p1781-1797.

Spread of Plasticity—Quasi-Plastic-Hinge Approach, Mourad R. Attalla, Gregory G. Deierlein and William McGuire, ST Aug. 94, p2451-2473.

Towards Robust, Effective and Efficient Second Order Analysis of Practical Steel Frames, S. L. Chan, Z. W. Zhou and W. F. Chen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1173-1178.

Uniform Lateral Load Capacity of Infilled Frames, Roger D. Flanagan and Richard M. Bennett, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p785-790. Utilizing Visco-Elastic Dampers in the Seismic Retrofit of a Thirteen Story Steel Framed Building, Patrick Crosby, James Kelly and J. P. Singh, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1286-1291.

Steel piles

Offshore Rescue, Jonathan A. French, Paul Gustafson, John S. Murk and Kellene M. Burn-Lucht, CE Oct. 94, p42-45.

Steel pipes

Headloss Analysis for Modern Piping Systems, L. Gregg Horn, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p10-27.

Rigid Beam-To-Column Connection Detail for Circular Composite Columns, Atorod Azizinamini and Y. Shekar, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1155-1160.

Steel Raw Water Pipeline Design Development, Steven J. Troch, Roger Strube and Lynn Hill, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p473-491.

Vacuum Design of Welded Steel Pipe Buried in Poor Soil, Reynold K. Watkins and George J. Tupac, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p226-238.

Yellowman Siphon Rehabilitation, Scott A. Stevens, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p82-88.

Steel plates

Effective Width of Locally Buckled Plates in Compression and Bending, Tsutomu Usami, ST May 93, p1358-1373.

Evaluation of Corroded Steel Chimneys, Tadeusz Nawrot and Andrzej S. Nowak, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p349-354.

Experimental Study of Thin Steel-Plate Shear Walls under Cyclic Load, Vincent Caccese, Mohamed Elgaaly and Ruobo Chen, ST Feb. 93, p573-587.

Mechanical Behavior of Metal Contact Joint, Shigeru Kuranishi, Futamia Naganuma, Masatoshi Nakazawa and Tetsuo Iwakuma, ST July 94, p1977-1990.

Postbuckling Behavior of Steel-Plate Shear Walls under Cyclic Loads, M. Elgaaly, V. Caccese and C. Du, ST

Feb. 93, p588-605.

Reinforced Concrete Beams with Plates Glued to Their Soffits, Deric John Oehlers, ST Aug. 92, p2023-2038.

Three-Dimensional Analysis of Flexible Circular Culverts, Ian D. Moore and Richard W. Brachman, GT Oct. 94, p1829-1844.

Steel structures

3D Simulation of End-Plate Bolted Connections, Archibald N. Sherbourne and Mohammed R. Bahaari, ST Nov. 94, p3122-3136.

The Behaviour and Design of Stressed-Arch (Strarch) Frames, Murray J. Clarke and Gregory J. Hancock, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p200-209.

Buckling of Single Layer Latticed Dome under Uniform Gravity Load, Masumi Fujimoto, Katsuhiko Imai and Toshitsugu Saka, (Spatial, Lattice and Tension Struc-tures, John F. Abel, ed., John W. Leonard, ed. and Celina

U. Penalba, ed., 1994), p509-518.

Compressive Strength of Large Scale HSLA-80 Steel Cel-lular Sections of a Double Hull Ship Structure, Alan Ah-Kum Pang, James M. Ricles, Le-Wu Lu and Perry Green, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1538-1543.

Cross Bracings in Tapered Systems: Semirigid Ends, Robert Levy, Fred Segal and Avigdor Rutenberg, EM

Aug. 94, p1803-1818.

Current and Future Research in Steel Bridge Structures, Karl H. Frank, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1077-1081.

Design of Imperfect Cross-Bracings, Fred Segal, Robert Levy and Avigdor Rutenberg, EM May 94, p1057-1075. Design of Mat Foundation for Egg Shape Digesters, S. S. Ibrahim and M. R. Graves, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p13-18.

Effect of Bolt Slippage on Ultimate Behavior of Lattice Structures, S. Kitipornchai, F. G. A. Al-Bermani and A. H. Peyrot, ST Aug. 94, p2281-2287.

Empirical Performance Comparison for Symbolic and Subsymbolic Learning Systems, Tomasz Arciszewski, Adam Borkowski, Tomasz Dybala, Janusz Racz and Piotr Wojan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1075-1082.

Flange Local Buckling and Behavior of I-Sections, Iqbal S. Sohal and Liping Cai, (Analysis and Computation,

Franklin Y. Cheng, ed., 1994), p213-222.

Genetic Algorithms in Discrete Optimization of Steel Truss Roofs, Vlasis K. Koumousis and Panos G. Georgiou, CP July 94, p309-325. Guide to Painting Steel Structures to be Published, CE Nov. 94, p21-22.

Hi-Tech Seismic Rehabilitation of 'Casino De Montreal', Claude Pasquin, Avtar Pall and Rashmi Pall, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1292-1297.

Induction Heating for Rehabilitation of Steel Structures Using Composites, Pierre E. Bourban, Erdal Karamuk, Roderic C. Don and John W. Gillespie, Jr., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p287-294.

Investigating the Behavior of a Lattice Structural Section, L. Shan and M. Hanson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p725-730.

Monitoring and Predicting Corrosion of Weathering Steel, Richard D. Granata, James C. Wilson and John W. Fisher, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1209-1216.

Prototype to Product - Challenge and Frustrations, Ian F. C. Smith, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1695-1702.

Reliability-Based Optimum Design for UBC and Nonde-terministic Seismic Spectra, C. C. Chang, J. F. Ger and F. Y. Cheng, ST Jan. 94, p139-160.

Some Aspects of Compression Member Design in Australia, Murray J. Clarke and Russell Q. Bridge, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1587-1592.

Steel Compression Member Design in the 1994 Canadian Standard, D. J. Laurie Kennedy, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p221-226.

Steel Detailing Neutral File from Modeling Software, Gerardo Cisneros and J. A. Bohinsky, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p254-259.

Test Experience with Heavy Angle Dead End Lattice Transmission Towers, J. M. Ferguson, D. D. Cannon and R. E. Nickerson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p601-606.

U.S. / Japan Large Scale Cooperative Research Program for Steel Structures, Robert D. Hanson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p103-108.

Design of Box Girder Bridges by Nonlinear Theory, Ahmad Salahuddin, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p491-496

Evaluation of Corroded Steel Chimneys, Tadeusz Nawrot and Andrzej S. Nowak, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p349-354.

Externally Stiffened I-Beam to Box-Column Connections, N. E. Shanmugam, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p719-724.

A Generalized Approach to the Local Stability of Stiffened Plates: Part II-Approximate Solution, Archibald Sherbourne and Osama Bedair, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1532-

Buckling of Plates with Stiffening Elastically-Restrained Edges, Raymond H. Plaut and Ardéshir Guran, EM Feb. 94, p408-411.

A Generalized Approach to the Local Stability of Stiffened Plates: Part I-Mathematical Formulation, Osama Bedair and Archibald Sherbourne, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1526-1531.

Nonlinear Analysis and Experimental Validation of a Stiffening Truss Chord of the Golden Gate Bridge, R. A. Dameron, R. S. Dunham and J. C. Castro, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1106-1114.

Nonlinear Analysis of Stiffened Laminated Cylindrical Shells Using the Layerwise Theory of Reddy, M. Savoia and J. N. Reddy, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p127-136.

Postcracking Formulation for Analysis of RC Structures Based on Secant Stiffness, Ananth Ramaswamy, F. Barzegar and G. Z. Voyiadjis, EM Dec. 94, p2621-2640.

Stiffness

Analysis of I-Girder Highway Bridges, Kassim M. Tarhini, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p684-687.

Analysis of Unstiffened and Stiffened Tubular Members Under External Pressure and Structural Loads, Spyros A. Karamanos and John L. Tassoulas, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1520-1525.

Basics of Flexible Pipe Structural Design, R. C. Prevost and K. K. Kienow, TE July/Aug. 94, p652-671.

The Behavior of a Building with Shallow Foundations on a Stiff Lateritic Clay, Luciano Décourt, (Vertical and Horizontal Deformations of Foundations and Embankments, Yeung, ed. and Guy Y. Félio, ed., 1994), Albert T. p1505-1515.

Bulb-T and Glulam-FRP Beams for Timber Bridges, J. F. Davalos, H. V. S. GangaRao, S. S. Sonti, R. C. Moody and R. Hernandez, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1316-1321.

Development of Hardwood Glulam Timber Bridge Standards, H. B. Manbeck, J. J. Janowiak, P. R. Blankenhorn and P. Labosky, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1304-1309.

Diaphragm Action of Cladding in Low-Rise Metal Build-Bala Sockalingam, David Montgomery, Scott Schiff and Peter Sparks, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1048-1053.

Equivalent Continuum Model for Deployable Flat Lattice Structures, Charis Gantes, Jerome J. Connor and Robert D. Logcher, AS Jan. 94, p72-91.

Foundation Uniform Pressure and Soil-Structure Interaction, Rusk Masih, GT Nov. 94, p2064-2071.

Hybrid Composite Beams: Analytical Modeling, S. A. Bhutta and I. L. Al-Qadi, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p178-190.

Lateral Stiffness of Frames and Effective Length of Framed Columns, Ruhi Aydın and Hasan Gönen, ST May 94, p1455-1470.

Messeturm Tower: Frankfurt, Germany, Irwin G. Cantor and Ahmad Rahimian, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1550-1555.

Moment-Rotation Behavior of Pultruded Beam-to-Column Connections, J. T. Mottram and A. J. Bass, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p423-428.

Nonlinear Analysis of a Reinforced Concrete Folded Plate Structure, Pattabhi Sitaram, Stuart Swartz and Chidambaram Channakeshava, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p857-866.

Nonlinear Response of Torsionally Coupled Base Isolated Structure, R. S. Jangid and T. K. Datta, ST Jan. 94, p1-

Nonlinear Undrained Lateral Response of Rigid Drilled Shafts Using Continuum Theory, Paul W. Mayne, Fred H. Kulhawy and Charles H. Trautmann, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p663-676.

One Peachtree Center: Atlanta Georgia, Housh Rahimzadeh and M. Nasim Akhtar, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p164-

Progress in Reinforced Concrete Column Design, R. Green, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p455-460.

Proposed Uniform Scale for Stiffness of Unbound Pavement Materials for Pavement Design, Herbert F. Southgate and Kamyar C. Mahboub, TE Nov./Dec. 94, p940-952.

Reliability Analysis of Stiffened Panels, E. Nikolaidis, O. Hughes, B. M. Ayyub and G. J. White, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1466-1471.

Semiactive Motion Control Using Variable Stiffness, David C. Nemin, Yingjie Lin and Roberto A. Osegueda, ST Apr. 94, p1291-1306.

Shear Effects on the Static Behaviour of Stiffened Pierced Walls, B. S. Choo and G. Q. Li, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1719-1726.

Single-Degree-of-Freedom Nonlinear Homogeneous Sys tems, José A. Inaudi, George Leitmann and James M. Kelly, EM July 94, p1543-1562.

Stability Analysis of Stiffened Plates and Shells, U. Jäppelt and H. Rothert, (Spatial, Lattice and Tension Structures,

John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p917-926.

Steel-Deck-Reinforced Concrete Diaphragms. I, W. Samuel Easterling and Max L. Porter, ST Feb. 94, p560-576.

Steel-Deck-Reinforced Concrete Diaphragms. II, W. Samuel Easterling and Max L. Porter, ST Feb. 94, p577-596.

Stiffness of Low Rise Reinforced Concrete Shear Walls, Working Group on the Stiffness of Concrete Shear Wall Structures, Structural Division, ASCE, (R.C. Murray, chmn.), 1994, 0-7844-0060-1, 196pp.

Structural Shape Analysis under the Prescribed Displace-ment Mode, Yasuhiko Hangai and Kazuaki Harada, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p694-703.

Topology Optimization of Plate and Shell Structures, K. Maute and E. Ramm, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and

Celina U. Penalba, ed., 1994), p946-955.

Towards Robust, Effective and Efficient Second Order Analysis of Practical Steel Frames, S. L. Chan, Z. W. Zhou and W. F. Chen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1173-1178.

WAK and Full-Scale Load Tests on Granular Fill, Kevin G. Sutterer, Karl W. Myers and Glenn J. Rix, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p153-163.

Working Stress Design Method for Reinforced Soil Walls, Mauricio Ehrlich and James K. Mitchell, GT Apr. 94,

p625-645.

Stiffness coefficients

Influence of Spatially Random Soil Stiffness on Foundation Settlements, Geoffrey M. Paice, D. V. Griffiths and Gordon A. Fenton, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p628-639.

Stiffness matrix

Bridge Diaphragm Elements with Partial Warping Restraint, C. C. Fu and Yao T. Hsu, ST Nov. 94, p3388-

Buckling and Vibration Analysis of Laminated Panels Using VICONOPT, David Kennedy, Fred W. Williams and Melvin S. Anderson, AS July 94, p245-262.

General Structure Representation for Neural Networks, George C. Lee and Mohamed F. Elkordy, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p47-56.

Practical Solution of the Flexibility to Stiffness Transformation Problem With a Mathematical Assistant for the Personal Computer, Thomas A. Lenox and Ronald W. Welch, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1465-1472.

COAST Educational Program for Teaching Structural Analysis, Czeslaw J. Branicki and Jerzy W. Wekezer, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p327-332.

Structure Modelization Using Expert Elements 'Neural Stiffness Method', Ricardo Barrenechea, Fabián Calcagno and Guillermo Gulli, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p676-683.

53 WAK Tests on Spread Footings, James C. Maxwell and Jean-Louis Briaud, (Vertical and Horizontal Deforma-tions of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p143-152.

Stilling basins

640

Behavior of Hydraulic Jump Basins, Boualem Hadjerioua, Emmett M. Laursen and Margaret S. Petersen, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p416-420.

Dispersive-Flow Energy Dissipator, Shou Long Yang, HY Dec. 94, p1401-1408.

Energy Dissipation for a RCC Stepped Spillway, Charles E. Rice and Kem C. Kadavy, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p548-552.

Hydrodynamic Forces in Hydraulic Jump Stilling Basins, António N. Pinheiro, António C. Quintela and Carlos M. Ramos, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh,

ed., 1994), p321-330.

Protection Against Scour at SAF Stilling Basins, Charles E. Rice and Kem C. Kadavy, HY Jan. 93, p133-139.

Riprap Sizing for Modified ARS-Type Basin, Steven R. Abt, Glenn B. Hamilton, Chester C. Watson and John Smith, HY Feb. 94, p260-267.

Scour Hole Depth Downstream of the SAF stilling Basin, M. Shafai-Bajestan, A. Sayahi and M. L. Albertson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1045-1049.

Using the Weir Back as an Energy Dissipator, Abdelkawi Khalifa, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p436-

Stirrups

Bond Development of Thermoplastic FRP Shear Reinforcement Stirrups, Justin Currier, Christian Fogstad, David Walrath and Charles Dolan, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p592-597.

Stochastic models

Analysis of Concrete Construction Live Loads on Newly Poured Slabs, Saeed Karshenas and Haitham Ayoub, ST May 94, p1525-1542.

Assessing Risk of Ground-water Pollution from Land-Disposed Wastes, Kahraman Ünlü, EE Nov./Dec. 94, p1578-1597.

Development of Hydro-Scheduling Model for Optimal Joint Operation of Multi-Reservoir Systems, S. B. Shim, J. W. Labadie, H. S. Lee, D. K. Koh and K. D. Shim, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p57-60.

Development of Stochastic Indicator Models of Lithology Yucca Mountain, Nevada, Christopher A. Rautman and Thomas H. Robey, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Com-

mittee, 1994), p2510-2519.

Evaluating the Steady State Stochastic Dynamic Programming Model for the High Aswan Dam, H. Abdelkader, J. Labadie and D. Fontane, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p826-829.

Explicit Stochastic Modelling of a Reservoir for Hydro-power Production, Slobodan P. Simonovic and Rangarajan Srinivasan, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuv-

el, ed., 1994), p368-371.

General Stochastic Unit Hydrograph, Allen Hjelmfelt and Menghua Wang, IR Jan./Feb. 94, p138-148.

Integration of Reliability, Uncertainty and Optimization in Hydraulics Systems: Classification of Problem Types, Kevin E. Lansey, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p262-265.

Investigation of Conflict Characteristics at Airway Intersections, Joseph N. Prashker, Irit Hocherman and Shlomo Bekhor, TE Sept./Oct. 94, p843-859.

Long Term Predictability of River Stages under ENSO Influence, Juan B. Valdés, Dara Entekhabi and Paolo Bartolini, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p366Minimum Thickness of Compacted Soil Liners: I. Stochastic Models, Craig H. Benson and David E. Daniel, GT Jan. 94, p129-152.

Minimum Thickness of Compacted Soil Liners: II. Analysis and Case Histories, Craig H. Benson and David E. Daniel, GT Jan. 94, p153-172.

A PC-Based Stochastic Project Scheduling and Costing Module, Kamalain K. Sha'ath and Gurdev Singh, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p9-16.

Probabilistic Nonlocal Damage Model for Continua with Random Field Properties, J. Carmeliet and H. Hens, EM Oct. 94, p2013-2027.

Representation of Spatial Variability of Rainfall in Aggregated Rainfall-Runoff Models, Paolo Bartolini and Juan B. Valdés, HY Oct. 94, p1199-1219.

Simulation of Correlated Nonstationary Lumber Properties, Frank Lam, Yin-Tang Wang and J. D. Barrett, MT Feb. 94, p34-53.

Statistical Sample Size for Construction of Soil Liners, Craig H. Benson, Huaming Zhai and Salwa M. Rashad, GT Oct. 94, p1704-1724.

Stochastic Control With Bounded Sample Paths: An Application to Reservoir Systems, S. G. Fletcher and K. Ponnambalam, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1025-1029.

A Stochastic Framework for the Modeling of Failures in Urban Drainage Systems due to Microscale Effects, P. La Barbera, L. Lanza and U. Parodi, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p197-208

Stochastic Modeling of Spatial Heterogeneities Conditioned to Hydraulic and Tracer Tests, Akhil Datta Gupta, D. W. Vasco, J. C. S. Long and Straits Vomvoris, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2624-2632.

Stochastic Optimal Control for Determination of Freshwater Inflows to Estuaries, Bing Zhao and Larry W. Mays, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p645-648.

Stochastic Vehicle-Queue-Load Model for Large Bridges, Ove Ditlevsen and Henrik O. Madsen, EM Sept. 94, p1829-1847.

Streamflow Forecasting for Han River Basin, Korea, Haitham M. Awwad, Juan B. Valdés and Pedro J. Restrepo, WR Sept./Oct. 94, p651-673.

Sustainable Management of Existing Reservoirs, Slobodan P. Simonovic, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p242-245.

Uncertainties in Flow Modeling and Forecasting for Niagara River, Randy D. Crissman, Chao-Lin Chiu, Weizu Yu, Kazumasa Mizumura and Ion Corbu, HY Nov. 93, p1231-1250.

Stochastic processes

Conditioned Stochastic Processes for Conditional Random Fields, Hiroyuki Kameda and Hitoshi Morikawa, EM Apr. 94, p855-875.

Demand-Driven Operation of Reservoirs Using Uncertainty-Based Optimal Operating Policies, Haralambos V. Vasiliadis and Mohammad Karamouz, WR Jan./Feb. 94, p101-114.

First-Passage Time of Secondary System Mounted on Yielding Structure, David C. K. Chen and Loren D. Lutes, EM Apr. 94, p814-834.

Frequency Analysis in Stochastic Linearization, F. Casciati, L. Faravelli and P. Venini, EM Dec. 94, p2498-2518.

Galerkin Sampling Method for Stochastic Mechanics Problems, P. D. Spanos and B. A. Zeldin, EM May 94, p1091-1106.

Genetic Algorithms Compared to Other Techniques for Pipe Optimization, Angus R. Simpson, Graeme C. Dandy and Laurence J. Murphy, WR July/Aug. 94, p423-443. Influence of Spatially Random Soil Stiffness on Foundation Settlements, Geoffrey M. Paice, D. V. Griffiths and Gordon A. Fenton, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p628–639.

Multi-Objective Optimization of Construction Schedules, Tadeusz Kasprowicz, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p185-190.

Multi-Reservoir Systems Optimization by the Aggregation/Decomposition Methodology, M. Bessa, K. Ponnambalam and A. Bogobowicz, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p192-196.

Parallel SDP for Multi-Reservoir Management, Elizabeth A. Eschenbach, Christine A. Shoemaker and Hugh M. Caffey, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p818-821.

Partial Infeasibility Method for Chance-Constrained Aquifer Management, Nathan Chan, WR Jan./Feb. 94, p70-89

Reliability Analysis of Creep and Shrinkage Effects, C. Q. Li and R. E. Melchers, ST Sept. 92, p2323-2337.

Reliability of Uncertain Nonlinear Trusses Under Random Excitation. II, R.-H. Cherng and Y. K. Wen, EM Apr. 94, p748-757.

Reliability of Uncertain Nonlinear Trusses Under Random Excitation. I, R.-H. Cherng and Y. K. Wen, EM Apr. 94, p733-747.

Stochastic Analysis of Ground-Water Flow in Semiconfined Aquifer, Mysore G. Satish and Jianting Zhu, HY Feb. 94, p147-168.

Stochastic Analysis of Unsaturated Flow and Transport With the Suflat Executive Numerical Code, Amvrossios C. Bagtzoglou, M. Rashidul Islam and Michael Muller, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2669-2677.

Stochastic Fluid Travel Times in Heterogeneous Porous Media, Wade E. Hathhorn and Randall J. Charbeneau, HY Feb. 94, p134-146.

Variability Response Functions of Stochastic Plane Stress/ Strain Problems, Friedrich J. Wall and George Deodatis, EM Sept. 94, p1963-1982.

Stoke's lav

Large Scale Measurements of Near Surface Orbital Velocities in Laboratory Waves by Using a Surface Following Device, Stefan Woltering and Karl F. Daemrich, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p710-784.

Stone columns

Analysis of Stone Columns Foundation for Storage Tank by FEM, P. K. Kundu, K. G. Sharma and A. Nanda, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p701-710.

A Comparison of Three Soil Improvement Techniques to Densify Liquefaction Susceptible Sands, Alec D. Smith and Edward B. Kinner, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Felio, ed., 1994), p1224-1236.

Control of Settlement and Uplift of Structures Using Short Aggregate Piers, Evert C. Lawton, Nathaniel S. Fox and Richard L. Handy, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p121-132.

An Investigation of the Reinforcing Effect of Stone Columns in Soft Clay, Doug Stewart and Martin Fahey, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p513-524.

Performance of Oil Storage Tanks on Vibroflotation Improved Hydraulic Fill in the Port of Tampa, Florida, Fintan J. Buggy, Ramon E. Martinez, James D. Hussin and Richard J. Deschamps, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p548-560. Settlement of Structures Supported on Marginal or Inad-equate Soils Stiffened With Short Aggregate Piers, Evert Lawton and Nathaniel S. Fox, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p962-

The Usefulness of Stone Columns to Reduce Settlements and Distortions - A Case History, Enrico Brignoli, Angelo Garassino and Pietro Renzo, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p561-570.

Stones

Laboratory Performance of Quartzite Based Stone Matrix Asphalt Mixtures (SMAM), Ali A. Selim, Ramzi Taha and Fouad Bayomy, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p635-642.

Long-Term Maintenance Plan for Vietnam Memorial, CE

Oct. 94, p10,12.

Monitoring and Modeling the Transport of Coarse Single Particles in Mountain Rivers, Peter Ergenzinger and Carmen de Jong, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p63

Sandstone Materials Used as Riprap, Steven R. Abt, Mitch-

Sanustone Materiais Used as Ktyrap, Steven R. Abl, Mitch-ell R. Peters, Terry L. Johnson and Scott A. Hogan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p467-471.
The Structural History of the Jacob Bachmann Tavern, Jack R. Kayser and Kristina Lammi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), 152. 1994), p1570.

Storage

Contaminant Fate and Transport Model in Pool-and-Riffle Streams, Il Won Seo, Dae Young Yu and Jae-Hyung Lee, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p165-169.

Modeling Work Space to Schedule Repetitive Floors in Multistory Buildings, Walid Y. Thabet and Yvan J. Beliveau, CO Mar. 94, p96-116.

Storage coefficient Nakajima Subsurface Dam, Satoshi Nagata, Kazuki Azuma, Masato Asano, Teruyuki Nishijima, Hideaki Shiiba, David S. Yang and Reika Nakata, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p437-440.

Using Cavity Well to Determine Aquifer Thickness and Constants, Mohammad Saleem, IR May/June 94, p504-519

Storage facilities

Bridge System Breaks New Ground as Storage Vault, CE July 94, p13-14.

Library of Congress Collecting GIS Maps, CE Apr. 94,

p13. Settlement Predictions at a Florida Port Facility, Thomas E. Selfridge and Kirk A. McIntosh, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p571-583.

The Usefulness of Stone Columns to Reduce Settlements and Distortions - A Case History, Enrico Brignoli, Angelo Garassino and Pietro Renzo, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p561-570.

Storage racks

Retrofit Racks for Revenues, Patrick Farrell, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p499-505.

Simulation Modeling Drystack Marina Facilities, Jeffrey G. Shelden and Kerry Simpson, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p587-596.

Storage tanks

Analysis of Stone Columns Foundation for Storage Tank by FEM, P. K. Kundu, K. G. Sharma and A. Nanda, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p701-710.

Beam Model for Base-Uplifting Analysis of Cylindrical Tanks, P. K. Malhotra and A. S. Veletsos, ST Dec. 94, p3471-3488.

Bio-Remediation of Simulated Fire Training Facility, Don-ald P. Butcher and Peter C. Gaskin, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p127-136.

Bridge System Breaks New Ground as Storage Vault, CE

July 94, p13-14.

Computing Response of Tanks with Two Liquids, Yu Tang, ST Dec. 94, p3668-3674.

Decision Analysis of Hanford Underground Storage Tank Waste Retrieval Systems, M. W. Merkhofer, D. A. Bitz, D. L. Berry and L. J. Jardine, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1739-1744.

Dynamic Response of Tank Containing Two Liquids, Yu Tang, EM Mar. 93, p531-548.

Houdini: In-Tank Mobile Cleanup Robot, Hagen Schempf, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p286-295.

Incorporating Stakeholder Values in Systems Engineering Decision Making, Philip M. Altomare, Michael L. Grygiel and Bernard G. Morais, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1762-1769.

Performance of Oil Storage Tanks on Vibroflotation Improved Hydraulic Fill in the Port of Tampa, Florida, Fintan J. Buggy, Ramon E. Martinez, James D. Hussin and Richard J. Deschamps, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p548-560.

Performance of Three Large-Diameter Oil Tanks on Soft Clay, Mamdouh Hamza, John R. Davie and Michael R. Lewis, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and

Guy Y. Félio, ed., 1994), p923-936.

Radiological Characterization of Hanford HLW Tank Farm Core Samples, Vojislav Banjac and A. Sharif Heger, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1110-1116.

Remote Infrared System for Scanning Hazardous Waste Tanks, Kim L. H. Morris, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1104-1109.

Storage Tanks: Going Above Ground, Thomas C. Wilson, CE Mar. 94, p59-61.

Tank Waste Information Network System (TWINS), Gary D. Roberson, Jim Brown and Dana S. Roberson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1731-

Tank-Testing Crawlers, ET June/July 94, p11.

Uplifting Analysis of Base Plates in Cylindrical Tanks, P. K. Malhotra and A. S. Veletsos, ST Dec. 94, p3489-

Uplifting Response of Unanchored Liquid-Storage Tanks, P. K. Malhotra and A. S. Veletsos, ST Dec. 94, p3525-

Storm drainage

A Chance Constrained Model Using Kinematic Wave Routing for Stormwater Infrastructure Rehabilitation, Timothy L. Jacobs and Miguel A. Medina, Jr., (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p39-54.

Combined Stormwater Drainage and Treatment, Jorge Romero-Lozano, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

Investigation of Dry-Weather Pollutant Entries Into Storm-Drainage Systems, Richard Field, Robert Pitt, Melinda Lalor, Michael Brown, William Vilkelis and Edward Phackston, EE Sept./Oct. 94, p1044-1066. Multi-Attribute Rehabilitation of Storm or Combined Sewer Systems, Santiago M. Reyna, Jacques W. Delleur and Jorge A. Vanegas, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p55-72.

Storm drains

The Danby Pipe Renovation System, George McAlpine, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p144-158.

Achieving Adequate BMP's for Stormwater Quality Management, Anne Jones-Lee and G. Fred Lee, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p524-531.

Computer Model for Infiltration System Design, Thomas N. Debo, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p241-248.

Conservation Measures in Urban Storm Water Manage ment, Hormoz Pazwash and Harry N. Tuvel, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p408-411.

Deicing Denver, David S. Backer, Don Smith and Craig E. Habben, CE July 94, p56-59.

Hydraulic Engineering '94, 2 vols, ISSN: 1070-1559, George V. Coroneo, ed. and Ralph R. Rumer, ed., 1994, 0-7844-0037-7, 1375pp.

Joint Pond-Wetland System Performance in Colorado, Ben Urbonas, Bao Vang and Jay Carlson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p384-387.

Mitigation of Non-Point Source Pollution Impacts on Groundwater Aquifers: A Case Study, Erez Sela, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p.246-249

Picturing Pollution, Kevin G. Coulton, CE Mar. 94, p62-

Retrofitting a Regional Stormwater Facility, Richard L. Schaefer, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p209-219.

Runoff Detention for Flood Volume or Erosion Control, A. Osman Akan and Edward N. Antoun, IR Jan./Feb. 94,

p168-178.

Sizing Stormwater Detention Basins for Pollutant Removal, G. V. Loganathan, E. W. Watkins and D. F. Kibler, EE Nov./Dec. 94, p1380-1399.

Statistical Techniques for Assessing Water-Quality Effects of BMPs, John F. Walker, IR Mar./Apr. 94, p334-347.

Large Diameter Storm Sewer with Energy Dissipation Structures, Lynn Hill, John Maki and Jerry Pfarr, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p395-410.

Storm surges

Analyzing Wave and Storm Surge Impacts from Hurricane Andrew on the Dade County Beach Erosion Control and Hurricane Protection Project, Kimberley A. Taplin and Jon M. Hubertz, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p587-596.

Applications of Large Domain Hydrodynamic Models to Generate Frequency-of-Occurrence Relationships, Norman W. Scheffner, Leon E. Borgman and David J. Mark, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p264Catastrophic Hurricanes May Become Frequent Events in Caribbean and Along the United States East and Gulf Coasts, Robert C. Sheets, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p37-51.

Coupled Lake Erie Air-Sea, Storm Resolving Forecasts and Predictions, the Viento Project, John G. W. Kelley, Chieh-Cheng J. Yen, Keith W. Bedford, Jay S. Hobgood and David J. Schwab, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p202-215.

The Daytona Beach "Large Wave" Event of 3 July 1992, Robert J. Thieke, Robert G. Dean and Andrew W. Garcia, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p45-

Estimation of Design Surge Heights by Utilizing Meteorologic and Oceanographic Data, Jahir Uddin Chowdhury and A. K. M. Tareque, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p918-922.

The Human Impact of Hurricane Iniki, James K. Mitchell, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad So-

tani, ed., 1994), p259-267.

Hurricane Iniki, A Hindcast, Winds, Windwaves, Swells, Storm Surge, and Wave Run-Up, C. L. Bretschneider, J. D. Agrawal, N. C. Carmella and K. A. Wohlmut, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p772-781.

Instrumented Buoy Network Response to Ocean Swell, Theodore Mettlach and David Gilhousen, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and

J. Michael Hemsley, ed., 1994), p28-44.

New Program for the Marine Observation and Prediction Center of the Central Weather Bureau, Beng-chun Lee, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p124-134.

Sensitivity of Great Lakes Forecasting System Nowcasts to Meteorological Fields and Model Parameters, William P. O'Connor and David J. Schwab, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p149-157.

Validation of a Continental-Scale Storm Surge Model for the Coast of Delaware, David J. Mark and Norman W. Scheffner, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blum berg, ed., Ralph Cheng, ed. and Craig Swanson, ed.,

1994), p249-263.

Storms

Analysis of Prototype Long Period Waves for Los Ange-les/Long Beach Harbor Resonance Studies, William C Seabergh, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p15-27.

Benefits of Hazard Mitigation Planning to Reduce Shore-line Impacts Due to Great Lakes Water Level Management Fluctuations and Severe Storms, Robert Nairn and Darryl Hatheway, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

Brief History of the Port of Sines and General Presentation of West Breakwater, Manuel Dinis C. Dias and Jeno F. Toppler, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p3-24.

Building Code Enforcement Issues, Hindsight and Foresight, John C. Pistorino, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p125-132.

Coastal and Oceanographic Impact of Hurricane Andrew, Hsiang Wang and Lihwa Lin, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p791-798. Coastal Circulation and Sedimentation During Severe Storms, Timothy R. Keen, Scott M. Glenn and Rudy L. Slingerland, (Estuarine and Coastal Modeling III, Malberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p279-293.

Critique: Rebuilding and Recovery, Ben L. Sill, (Hurri-canes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed.,

1994), p300-302.

The December 1992 Storm at the New York Mud Dump Site, Scott McDowell, Brian May and Douglas Pabst, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p786-

Disaster Debris Management and Diversion from Hurri-cane Iniki, Wayne Rifer, Brenda Osterhaug and Dale Burton, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p548-557.

Effectiveness of Storm Shutters in Hurricane Damage Prevention, Raja R. A. Issa, Camille A. Issa, Ajay Shanker and Paul Gencorelli, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A.

Cook, ed. and Mehrdad Sotani, ed., 1994), p486-495. Failure of the Turkey Point Unit 1 Reinforced Concrete Chimney During Hurricane Andrew, W. F. Brannen, T. D. Joseph, Randolph W. Snook and Robert A. Port-house, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p405-414.

Gust Speeds in Hurricanes, R. D. Marshall, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1457-1462.

Hurricane Iniki and Typhoon Omar Meteorology, Thomas A. Schroeder, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p84-91.

Hurricane Iniki Effects on Coral Sand and Beach Processes on Kauai, Hans-Jürgen Krock and Doug Neill, (Hurri-canes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p782-790.

Hydrodynamics of Random Wave Boundary Layers, B. A. O'Connor, H. Kim and J. J. Williams, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and

Nicholas C. Kraus, ed., 1994), p879-893.

Impact of Hurricane Andrew on Electrical Generating Fa-cilities, W. F. Brannen, R. L. Adams and J. E. Sheetz, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p397-404.

Inner Continental Shelf Transport Processes: The Middle Atlantic Bight, L. D. Wright, O. S. Madsen, T. A. Chis-holm and J. P. Xu, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed.,

1994), p867-878.

Joint Probability of Superelevated Water Levels and Wave Heights at Duck, North Carolina, Douglas A. Gaffney and Gregory L. Williams, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p905-917.

The Manufactured Home Dilemma, James R. McDonald, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad So-

tani, ed., 1994), p195-202.

New Technology for Navigation Entrance Black River Canal, Larry Osborn, Kevin MacIntosh and Dave Werren, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994),

Overview of Hurricane Andrew in South Florida, Ronald A. Cook, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p70-83.

An Overview of the Federal Response to Hurricane Iniki, Frank R. Finch, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p294-299.

- Performance of Spun Prestressed Concrete Poles During Hurricane Andrew, Fouad H. Fouad, Norman L. Scott, Elizabeth Calvert and Michael Donovan, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p362-376.
- Predicting Wave Spectra With a Third Generation Spectral Wave Model, Charles L. Vincent, Ph.D., Robert E. Jensen, Ph.D. and Hans C. Graber, Ph.D., (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p420-432.
- Protecção Provisória do Molhe Oeste do Porto de Sines, Fausto Gonçalves Henriques and Ismael Byscaia de Carvalho, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p35-53.
- Reducing the Risks of Severe Windstorm Disaster; an International Perspective, Alan G. Davenport, (Hurricanes of 1992: Lessons Learned and Implications for the Fu-ture, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p147-157.
- The Response of a Barred Coast to a Sequence of Storms, Felix C. J. Wolf, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p44-58.
- A Second-Generation Wave Model for Coastal Wave Prediction, J. A. Ewing and R. C. Hague, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p576-589.
- Short Synthesis of Some Studies Carried Out for the Repairing of Sines Port West Breakwater, G. Paolella and S. Corsini, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p70-98.
- A Survey of Building Performance in Hurricane Iniki and Typhoon Omar, James W. Sheffield, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p446-455.
- Temporary Protection of the West Breakwater of the Port of Sines, Fausto Goncalves Henriques and Ismael Byscaia de Carvalho, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p54-69.
- Wave-Height Distribution in Storm Sea: Effect of Wave Breaking, Malcolm O. Green, WW May/June 94, p283-301

- Assessing Stormwater Impacts, G. Allen Burton, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1198-1202.
- A Chance Constrained Model Using Kinematic Wave Routing for Stormwater Infrastructure Rehabilitation, Timothy L. Jacobs and Miguel A. Medina, Jr., (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p39-54.
- Combined Stormwater Drainage and Treatment, Jorge Romero-Lozano, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1229-1231.
- Coping with EPA's Transportation Storm Water Permit, James P. Amick, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1219-
- General Urban Runoff Model for Water Quality Investiga-tions, Robert E. Pitt, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1213-1218.

- Local Sewer Rehabilitation Metro Chicago, William A. Macaitis and Robert Kuhl, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p111-122.
- Modeling Hydrologic and Pollutant Transport Processes for Stromwater Runoff to Surface Waters, Leslie L. Shoemaker, Mohammed Lahlou, Andrew Stoddard and James Pagenkopf, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1208-1212.
- NPDES Storm Water Permit Compliance at Air Force Installations, Paul Makowski and Marvin Smith, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1224-1228.
- Predicting Sediment Yield in Storm-Water Runoff from Urban Areas, Thomas W. Haster and Wesley P. James, WR Sept./Oct. 94, p630-650.
- Preliminary Sizing of Detention Reservoirs to Reduce Peak Discharges, Bruce M. McEnroe, HY Nov. 92, p1540-1549.
- The Regulatory Pendulum: Has it Finally Come to Rest for CSO Control? Nancy J. Wheatley, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p187-197.
- Storm Water Pollution Control for Industry: Developing Effective Guidelines Through Public Involvement, L Donald Duke, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p517-520.
- Survey of Stormwater Detention State of Practice, Ben R. Urbonas, Jay Carlson and L. Scott Tucker, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p873-876.
- Urban Runoff Based on Land Use and Particle Size, Linda D. Pechacek, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1242-1246

Stormwater management

- Achieving Adequate BMP's for Stormwater Quality Management, Anne Jones-Lee and G. Fred Lee, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p524-531.
- Dry Weather Stormwater Management Yakima, WA, John R. Genskow, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p123-126.
- Effect of Nonstandard Rainfall Distributions on Stormwater Management Detention Basins, Robert G. Traver and Ronald A. Chadderton, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), 612-615.
- Elmhurst Quarry Flood Control Project, Anthony J. Charlton, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p107-110.
- Field Test of Stormwater Best Management Practices, S. L. Yu, S. L. Barnes, R. J. Kaighn, Jr. and S. L. Liao, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p508-515.
- Mianni International Airport Stormwater NPDES Plan, Armando I. Perez, Jonathan Z. Goldman, Michael F. Schmidt and Edward E. Clark, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p540-547.
- Modeling of Infiltration from Trenches for Storm-Water Control, Michael Duchene, Edward A. McBean and Neil R. Thomson, WR May/June 94, p276-293.
- Preliminary Sizing of Detention Reservoirs to Reduce Peak Discharges, Bruce M. McEnroe, HY Nov. 92, p1540-1549
- Regulation of Nonpoint Sources, William Whipple, Jr., (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p198-203.

- Retrofitting a Regional Stormwater Facility, Richard L. Schaefer, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p209–219.
- Role of Urban Storm-Flow Volume in Local Drainage Problems, Bruce K. Ferguson and Tamas Deak, WR July/Aug. 94, p523-530.
- Sizing Stormwater Detention Basins for Pollutant Removal, G. V. Loganathan, E. W. Watkins and D. F. Kibler, EE Nov./Dec. 94, p1380-1399.
- Stormwater Regulation: The Local Perspective, Doug Harrison, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p177-186.
- Survey of Stormwater Detention State of Practice, Ben R. Urbonas, Jay Carlson and L. Scott Tucker, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p873-876.
- A Survey of Stormwater Infiltration Basins in the Puget Sound Region, Karin Hilding and Rich Horner, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p722-725.
- Third Lake Watershed Assessment and Action Plan, Carey M. Brand, Gary E. Raasch and Marion E. Kessy. (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p.257-261.
- Trenchless Relief, Tad Pilecki, Stephen J. Klein and Art Hamid, CE Jan. 94, p58-60.
- Utilizing Mathcad for Hydraulic Design of Stormwater Pump Stations, T. Chris Evensen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p814-821.
- Why Design Storm Methods Have Become Unethical, William James, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1203-1207

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- Analysis of Arch Dams, Alexander Michael Ansah, ST May 93, p1516-1538.
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- Bulb-T and Glulam-FRP Beams for Timber Bridges, J. F. Davalos, H. V. S. GangaRao, S. S. Sonti, R. C. Moody and R. Hernandez, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1316-1321.
- Convergence Rates of the Method of Successive Elastic Solutions in Thermoplastic Problems of a Layered Concentric Cylinder, Todd O. Williams and Mark-Jerzy Pindera, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p348-357.
- Dynamic Pavement-Strain Histories from Moving Traffic Load, Zia Zafir, Raj Siddharthan and Peter E. Sebaaly, TE Sept./Oct. 94, p821-842.
- Finite Strain Consolidation for Vertical Drains, R. Robert Goughnour, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p688-700.
- Low Strain Dynamic Testing of Wood Piles Supporting an Existing Pier, Mohamad Hussein, William Wright and Billy Edge, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p940-945.
- Management of Dredged Material Placement Operations, Timothy D. Stark, Iván Contiereras and Jack Fowler, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1353-1369.
- Mechanics of Growing Deformable Solids: A Review, Vyacheslav E. Naumov, EM Feb. 94, p207-220.
- Predicting Creep and Shrinkage Effects in Cracked Concrete Elements, A. S. Prasada Rao, R. Jayaraman, V. Vimalanandam and S. Sai Babu, ST Sept. 94, p2784-2792.
- Stress and Strain in Curved Noncracked Concrete Members, Makoto Kawakami and Amin Ghali, ST Feb. 94, p527-537.

Stress-Strain Curves for Brick Masonry in Biaxial Compression, Krishna Naraine and Sachchidanand Sinha, ST June 92, p1451-1461.

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Tests of Yielding Anchorages Under Monotonic Loadings John F. Bonacci and Jorge Marquez, ST Mar. 94, p987-

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Estimation of Damping Ratio of Cable-Stayed Bridges for
Seismic Design, Kazuhiko Kawashima, Shigeki Unjoh and Meguru Tunomoto, ST Apr. 93, p1015-1031. Late Stage Damage in G30-500/PMR-15 Laminates.

Wieslaw K. Binienda, Anping Hong, Andrew Gyek-enyesi and John Hemann, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p316-325.

Experimental Study of Embedded Fiber-Optic Strain Gauges in Concrete Structures, S. F. Masri, M. S. Agbabian, A. M. Abdel-Ghaffar, M. Higazy, R. O. Claus and M. J. de Vries, EM Aug. 94, p1696-1717.

Investigating the Behavior of a Lattice Structural Section. L. Shan and M. Hanson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p725-730. Physical Model Tests of Dolos Impact Stresses, J. M. Stal-

lings and J. W. Tedesco, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p67-72.

Strain Measurement on the Runner of a Hydroelectric Turbine, K. Warren Frizell, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p416-424.

Strain hardening

Advances in Strain-Hardening Cement Based Composites, Victor C. Li, (Advances in Cement and Concrete, Mi-chael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p235.

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Predictions of Footing Tests Sponsored by the FHWA Using a Strain Hardening Elastoplastic Constitutive Model, I. Shahrour and M. Zaher, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p224-227.

Strain measurement

Instrumentation and Testing of a Three Hinge Arch for Service Loads Increase, John Choros, Eduardo Ramirez and Vinaya Sharma, (Structures Congress XII, N. C Baker, ed. and Barry J. Loodno, ed., 1994), p1106-1111.

Settlement of Footings on Granular Materials: Low and Large Strain Parameters, F. Ahtchi-Ali and J. C. San-tamarina, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1287-1297.

Anisotropic Plasticity Model for Foams and Honeycombs, H. L. Schreyer, Q. H. Zuo and A. K. Maji, EM Sept. 94,

p1913-1930.

Compressibility of Clays: Fundamental and Practical Aspects, Serge Leroueil, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p57-76.

High-Strain Kinetic Testing of Deep Foundations, Alain E. Holeyman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p934-939.

Implementation of a Viscoplastic, Kinematic Hardening Constitutive Model for Impact Prediction, Jeffrey R. Sachs, Charles S. White and Frederick C. Taverner, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p388-401.

Load Rate Effects on Concrete Compressive Strength, Joseph W. Tedesco, C. Allen Ross and Mary L. Hughes, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p245-251.

New Perspectives on Soil Creep, Matthew R. Kuhn and James K. Mitchell, GT Mar. 93, p507-524.

Shock-tested R. C. Slabs: Significant Parameters, François Toutlemonde and Pierre Rossi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p227-232

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Engineering R&D Strategy, Harvey M. Bernstein, CE Feb. 94, p44-46.

Interpretive and Modelling Problems of Risk and Uncertainty in Bidding Techniques, David Eaton, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2038-2045

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Management Strategy of Cement Industry in Technology Toward the Next Century, Hiroshi Uchikawa, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p524-561.

Nuclear Regulatory Commission Staff Approaches to Improving the Integration of Regulatory Guidance Documents and Prelicensing Reviews, Robert L. Johnson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1604-1608.

Planning and Management of Change, Robert M. Nelson, Jr., C. Thomas Statton and Robin K. St. Clair, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1722-

Portfolio Approach to Strategic Management of A/E Firms, David Veshosky, ME Sept./Oct. 94, p41-47.

Restoration of Wetland Ecosystems: A Challenge to Our Nation's Civil Engineers, James T. B. Tripp, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p229-232

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Observations Related to the Use of the Sigma Coordinate Transformation for Estuarine and Coastal Modeling Studies, John F. Paul, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p336-350

Salinity and Dissolved-Oxygen Dynamics in a Wind-Driven Estuary, Jerad D. Bales and R. G. Garrett, (Hy-draulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1311-1315.

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Stratified flow

The Formation of a Turbidity Maximum in an Estuary, Kathryn Pickens, Zenitha Chroneer, Poorvi Patel and Wilbert Lick, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p187-201.

Hydraulics of Seawater Purging in Tunneled Wastewater Outfall, E. Eric Adams, Dipak Sahoo, Christopher R. Liro and Xueyong Zhang, HY Feb. 94, p209-226.

Localized Sigma Coordinates for the Vertical Structure of Hydrodynamic Models, Angré B. Fortunato and António M. Baptista, (Estuarine and Coastal Modeling III, Mal-colm L. Spaulding, ed., Keith Bedford, ed., Alan Blum-berg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p323-335.

Simple Internal Waves and Bores, J. Bühler, HY May 94,

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Baddour, EE Jan./Feb. 94, p242-253.

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Stream channels

Analysis of blocking phenomena in bifurcated channels found in mountainous rivers, Kazuyoshi Hasegawa and Toshinao Mizugaki, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p829-833.

Bed Load Prediction in Steep Mountain Rivers, Tamotsu Takahashi and Toyoaki Sawada, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p810-814.

Bias in Regression Estimates of Manning's n, Kenneth L. Wahl, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p727-731.

ed. and Raiph R. Rumer, ed., 1994), p727-731.
Erosion and Deposition by Debris Flows in Mountainous
Channels on North Fork Mountain, Eastern West Virginia, Daniel A. Cenderelli and J. Steven Kite, (Hydraulic
Engineering '94, George V. Cotroneo, ed. and Ralph R.
Rumer, ed., 1994), p772-776.

Evaluating Flow Resistance Using Height of Roughness Protrusions, Ivana Marešová, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p712-716.

Flow Resistance of High-Gradient Gravel Channels, R. G. Millar and M. C. Quick, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p717-721.

A General Theory of Channel Adjustment in High Gradient Streams, Gordon E. Grant, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p817-818.

Mathematical Models to Assess Stream Dynamics, Laura Bittner, Yarko Niño and Marcelo García. (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p391-395.

On Habitat Simulation in Mountain Rivers, Robert T. Milhous, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p850-

with Indirect Determinations Streamflows in Steep, Desert Stream Channels, Patrick A. Glancy and Rhea P. Williams, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p635-639.

Roughness Coefficients for High-Gradient Channels in New York State. William F. Coon, (Hydraulic Engineer-ing '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p722-726.

Steep Constructed Stream Channels and Chutes, Kenneth R. Wright, F. Robert McGregor and Gary Lacy, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p657-661. Supercritical Flows Versus Subcritical Flows in Natural

Channels, Douglas J. Trieste, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p732-736.

Stream erosion

Retrofitting a Regional Stormwater Facility, Richard L. Schaefer, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p209-219.

Stream function

Mixing by Shear Instabilities of the Longshore Current, J. C. Church, E. B. Thornton and J. Oltman-Shay, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p376-390.

Comparison of Current Meters Used for Stream Gaging, Janice M. Fulford, Kirk G. Thibodeaux and William R. Kaehrle, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p376-385.

A Computerized Open Channel Flow Measurement Device, Stan E. Malinky, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation,

Clifford A. Pugh, ed., 1994), p27-36.

Historical Trends in Flood Discharges on the Upper Missis-sippi River, H. Vernon Knapp, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p618-622

Teaching with Multimedia: Example and Issues, Rollin H.

Hotchkiss, El July 94, p279-289.

Using Drop Structures for Stream Gaging, Bobby J. Brown, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p21-26.

Stream improvement

Instream and Streambank Environmental Feature Guidelines, J. Craig Fischenich, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p406-410.

Streambed armoring

Streambed Armoring, C. O. Chin, B. W. Melville and A. J. Raudkivi, HY Aug. 94, p899-918.

Streambeds

An Analysis of Flow Velocity Profiles, Stream Bed Roughness, and Resistance to Flow in Natural Gravel Bed Streams, Normand E. Bergeron, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p692-696.

Is Bedform Development Chaotic? César Mendoza-Cabrales, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p78-81.

Sediment Deposition and Entrapment in Vegetated Streambeds, Steven R. Abt, Warren P. Clary and Christopher I. Thornton, IR Nov./Dec. 94, p1098-1111.

- An Analysis of Flow Velocity Profiles, Stream Bed Roughness, and Resistance to Flow in Natural Gravel Bed Streams, Normand E. Bergeron, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p692-696.
- Comparison of Current Meters Used for Stream Gaging, Janice M. Fulford, Kirk G. Thibodeaux and William R Kaehrle, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p376-385.
- Effects of Simulated Ice on the Performance of Price Type-AA Current Meter Rotors, Janice M. Fulford, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p251-258.
- Estimation of Mean Velocity for Flow Under Ice Cover, Martin J. Teal and Robert Ettema, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p242-250.
- Floodflow Effects on Riparian Vegetation in Arizona, J. V. Phillips and H. W. Hjalmarson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p707-711.
- Flow patterns in a mountain stream, Lisa C. Hubbard and Colin R. Thorne, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),
- Flow-Duration Curves I: New Interpretation and Confidence Intervals, Richard M. Vogel and Neil M. Fennessey, WR July/Aug. 94, p485-504
- Ground-Water Recharge in Fortymile Wash Near Yucca Mountain, Nevada, 1992-93, Charles S. Savard, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1805-
- Methods for Measuring Discharge under Ice Cover, John F. Walker, HY Nov. 94, p1327-1336.
- One- and Two-Dimensional Analysis of Flow in Hotophia Creek, MS, Yafei Jia and Carlos V. Alonso, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p589-594.
- oblems with Indirect Determinations of Peak Streamflows in Steep, Desert Stream Channels, Patrick A. Glancy and Rhea P. Williams, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p635-639.
- A Regional Model of Daily Streamflow for the Northeast United States, Neil M. Fennessey and Richard M. Vogel, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),
- A Salmon Population Model for Evaluating Alternative Flow Regimes, John M. Bartholow and Terry J. Waddle, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p877-880.
- Streamflow Related to Channel Geometry in Northern New England, Kevin J. Palaia and S. Lawrence Dingman, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p865-869.

Streamflow forecasting

- Evaluating an Autoregressive Model for Stream Flow Forecasting, Yuan Cheng, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1105-1109.
- Streamflow Forecasting for Han River Basin, Korea, Haitham M. Awwad, Juan B. Valdés and Pedro J. Restrepo, WR Sept./Oct. 94, p651-673.
- Time-Series Modeling for Long-Range Stream-Flow Fore-casting, Michael Bender and Slobodan Simonovic, WR Nov./Dec. 94, p857-870.

Streamflow generation models

The Application of Streamflow Duration Curves in Water Resources Engineering, Richard M. Vogel and Neil M. Fennessey, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p201-204.

Streamflow records

Water Balance of Blue Nile River Basin in Ethiopia, Peggy A. Johnson and P. Douglas Curtis, IR May/June 94,

Streams

An Alternative Equation for the Mean Velocity in Gravel-Bed Rivers and Mountain Torrents, Dieter Rickenmann, Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p672-676.

An Approach to the Calculation Method of Mean Sediment

An Approach to the Calculation Method of Mean Sediment Size, Yingyan Chen and Huilin Zhao, (Hydraulic Engi-neering '94, George V. Cotroneo, ed. and Ralph R. Ru-mer, ed., 1994), p805–809. Computer Model for Infiltration System Design, Thomas N. Debo. (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p241-248.

Contaminant Fate and Transport Model in Pool-and-Riffle Streams, Il Won Seo, Dae Young Yu and Jae-Hyung Lee, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p165-169.

Design of Manning's-Rougness-Coefficient Study in New York State, William F. Coon, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p677-681.

Effects of Particle Shape on Bedload Transport, M. Moore and P. Diplas, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p800-

804.
Expert System for Bridge Scour and Stream Stability, Suzanne Pollon, Lea Adams, Richard Palmer and George Turkiyyah, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1389-1396.
HEC River Analysis System (HEC-RAS), Vernon Bonner, Gary Brunner and Mark Jensen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p376-380.
Justream Flow Studies: Susguebanne Basin and Pennsylva.

Instream Flow Studies: Susquehanna Basin and Pennsylvania, Donald R. Jackson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and

ment: Solving the Property, Dates of Thinace, Canada, Canada,

1994), p1166-1170.

Macro-Roughness Effects on Stream Reaeration, Douglas B. Moog and Gerhard H. Jirka, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p994-998.

Non-Point Pollution Loadings and their Impacts on Tennessee Valley Reservoirs, Julia Burr Avera and John A. Gordon, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1247-1251.

Problems of Stream Flood Simulation and Prediction, Shou-shan Fan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1110-1114

Recent Applications of Acoustic Doppler Current Profilers, K. A. Oberg and David S. Mueller, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p341-350.

Retrofitting a Regional Stormwater Facility, Richard L. Schaefer, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation

Programs and Techniques, ASCE, 1994), p209-219.
Sediment Deposition and Entrapment in Vegetated Streambeds, Steven R. Abt, Warren P. Clary and Christopher I. Thornton, IR Nov./Dec. 94, p1098-1111.

The State (By State) of Water Quality, CE Mar. 94, p8.

Stream Water-Temperature Sensitivity to Weather and Bed
Parameters, Bashar A. Sinokrot and Heinz G. Stefan, HY June 94, p722-736.

The Transport of Gravels in Boulder-Bed Streams, Alan F. Barta, Peter R. Wilcock and Conor C. C. Shea, (Hydrau lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p780-784.

Using the SedBed Monitor to Measure Bed Load, Roger A. Kuhnle and Robert W. Derrow, II, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p129-138.

Vertical Sorting Within Dune Structure, Mohamed Abdel-Motaleb, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p139-148.

Strength

Admixture Applications in Large Concrete Pours, Augus-tine Uchechukwu Elinwa, MT Aug. 94, p352-356.

Application of Nondestructive Evaluation to Wood Poles, Ronald W. Anthony and Jozsef Bodig, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p669-676.

Asphalt Portland Cement Concrete Composite: Laboratory Evaluation, I. L. Al-Qadi, H. Gouru and R. E. Weyers,

TE Jan./Feb. 94, p94-108.

Cementing Action in Non-Portland Cement Systems: Sulpho-Pozzolanic and Silico-Pozzolanic Reactivity, R. T. Hemmings and E. E. Berry, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p329-336.

Characteristics of Silica-Fume Concrete, Safwan A. Khedr and Mohamed N. Abou Zaid, MT Aug. 94, p357-375

The Chemistry of MDF Materials, M. R. Silsbee and D. M. Roy, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p193-209.

Construction Use of Polyester Composite Using Recycled PET, Karim S. Rebeiz, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p80-87.

Edge Strength of Window Glass by Mechanical Test, Chris P. Pantelides, Gregory P. Sallee and Joseph E. Minor,

EM May 94, p1076-1090. Effect of Heat Treatment on Strength of Clays, R. C. Joshi, Gopal Achari, D. Horsfield and T. S. Nagaraj, GT June

94, p1080-1088. Effects of Confinement on Concrete Columns: Plasticity

Approach, A. I. Karabinis and P. D. Kiousis, ST Sept. 94, p2747-2767. Experimental Evaluation and Finite Element Analysis of Masonry-Infilled R/C Frames, P. B. Shing, A. B. Mehrabi, M. Schuller and J. L. Noland, (Analysis and Compu-

tation, Franklin Y. Cheng, ed., 1994), p84-93. Fracture Mechanics and Size Effect of Concrete in Tension, Tianxi Tang, Surendra P. Shah and Chengsheng Ouyang, ST Nov. 92, p3169-3185.

Grout Repair of Dented Offshore Tubular Bracing Experimental Behavior, James M. Ricles, Troy E. Gillum

and William Lamport, ST July 94, p2086-2107. High-Strength Concrete Columns Confined by Rectangular Ties, Daniel Cusson and Patrick Paultre, ST Mar. 94, p783-804.

In-Place Determination of Concrete Strength by the Impact-Echo Method, Stephen Pessiki and Matthew Johnson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1340-1345.

Lateral and Withdrawal Strength of Nail Connections for Manufactured Housing, Steve G. Winistorfer and Lawrence A. Soltis, ST Dec. 94, p3577-3594.

Li, Qizhi, Richard A. Schultz, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2106-2111.

Mechanical Properties of Very Early Strength Concretes, S. H. Ahmad and Paul Zia, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p701-708.

Metakaolin Increases Strength and Lowers Permeability of High Performance Concrete, K. Gruber, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and

Shondeep L. Sarkar, ed., 1994), p613.

Microstructural Development in High-Volume Fly-Ash
Cement System, Aimin Xu and Shondeep L. Sarkar, MT Feb. 94, p117-136.

Moment-Curvature Relationships for Dented Tubular Sections, L. Duan, J. T. Loh and W. F. Chen, ST Mar. 93. p809-830.

Polymer Cement Composite - A Critical Review, Satish Chandra, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994),

Postcyclic Undrained Strength for Cohesive Soils, Kazuya Yasuhara, GT Nov. 94, p1961-1979.

A Self-Balancing Laminate, Jozsef Bodig, Robert T. Brooks and Allan G. Burk, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p689-694.

Simplified Strength Prediction for Cold-Formed C- and Z-Shapes, R. A. LaBoube, ST June 93, p1733-1739.

Steel-Deck-Reinforced Concrete Diaphragms, I. W. Samuel Easterling and Max L. Porter, ST Feb. 94, p560-576.

Steel-Deck-Reinforced Concrete Diaphragms. II, W. Samuel Easterling and Max L. Porter, ST Feb. 94, p577-596.

Steel-Fiber-Reinforced Wet-Mix Shotcrete: Comparisons with Cast Concrete, Nemkumar Banthia, Jean-François Trottier and Denis Beaupré, MT Aug. 94, p430-437

Strength of FRC Corbels in Flexure, Nijad I. Fattuhi, ST Feb. 94, p360-377.

Strength of New Heat Treated Window Glass Lites and Laminated Glass Units, H. Scott Norville, Paul M. Bove, Darrel L. Sheridan and Stacey L. Lawrence, ST Mar. 93, p891-901.

Toughness Characterization of Steel-Fiber Reinforced Concrete, Jean-Francois Trottier and Nemkumar Banthia, MT May 94, p264-289.

AISI-FHWA Model Bridge Test, Mark Moore, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1065-1070.

Analysis of Arch Dams, Alexander Michael Ansah, ST May 93, p1516-1538.

Compression Response of Cracked Reinforced Concrete, F. J. Vecchio and M. P. Collins, ST Dec. 93, p3590-3610.

Computer Applications in Liquefaction Analysis, Sivanuja S. Sundaram and K. K. Muraleetharan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p123-

Creep in Composite Continuous Beams. II: Parametric Study, Luigino Dezi and Angelo Marcello Tarantino, ST July 93, p2112-2133.

Design Guidelines for the Use of Debonded Strands, Bruce W. Russell and Ned H. Burns, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p618-

Development Length of Uncoated Prestressing Strand, Susan N. Lane, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p624-629

Effect of Nonuniform Stresses on Measured DSS Stress-Strain Behavior, Don J. DeGroot, John T. Germaine and Charles C. Ladd, GT May 94, p892-912.

Explicit Stresses under Rectangular Footings, R. Irles and F. Irles, GT Feb. 94, p444-450.

Fatigue Damage Accumulation Under Stochastic Stress Histories, Shahram Sarkani, Naser K. Buresli and George Michaelov, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p839-844.

Finite Element Modeling of Concrete Expansion and Confinement, F. J. Vecchio, ST Sept. 92, p2390-2406.

A Generalized Approach to the Local Stability of Stiffened Plates: Part I-Mathematical Formulation, Osama Bedair and Archibald Sherbourne, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1526-1531.

A Generalized Approach to the Local Stability of Stiffened Plates: Part II-Approximate Solution, Archibald Sherbourne and Osama Bedair, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1532-1537.

Heterogeneous Hardening Plasticity Model for Concrete, H. C. Chan, Y. K. Cheung and Y. P. Huang, ST Jan. 94, p46-62.

Hot Spot Stresses of Tubular Joints Subjected to Combined Loadings, Ai-Kah Soh and Chee-Kiong Soh, ST Feb. 93,

p654-661.

Implementation of a Viscoplastic, Kinematic Hardening Constitutive Model for Impact Prediction, Jeffrey R. Sachs, Charles S. White and Frederick C. Taverner, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994). p388-401.

In Situ Stress Determination Research Study, William G. Austin and Paul M. Thompson, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p2429-2436.

Influence of Horizontal Stresses on Gilgai Landforms, Britt Maxwell, GT Aug. 94, p1437-1444.

Large-Scale Loading Tests of Shallow Footings in Pneumatic Caisson, Osamu Kusakabe, Yoshito Maeda and Masatoshi Ohuchi, GT Nov. 92, p1681-1695

Load Rate Effects on Concrete Compressive Strength, Joseph W. Tedesco, C. Allen Ross and Mary L. Hughes, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), 9245-251.

LRFD Provisions for Wood Bridges, Michael A. Ritter and Laboration of the Congress Congress of the Congress of

LRFD Provisions for Wood Bridges, Michael A. Ritter and Andrzej S. Nowak, (Sructures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p549-554. Mechanical Behavior of Metal Contact Joint, Shigeru Kuranishi, Futamia Naganuma, Masatoshi Nakazawa and Tetsuo Iwakuma, ST July 94, p1977-1990.

Nonlinear Analysis of a Reinforced Concrete Folded Plate Structure, Pattabhi Sitaram, Stuart Swartz and Chidambaram Channakeshava, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p857-866.

Nonlinear Finite Element Analysis of Concrete Deep Beams, A. Fafitis and Y. H. Won, ST Apr. 94, p1202-

Nonlocal Damage Theory Based on Micromechanics of Crack Interactions, Zdeněk P. Bažant, EM Mar. 94, p593-617.

Physical Model Tests of Dolos Impact Stresses, J. M. Stallings and J. W. Tedesco, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p67-72. Postcracking Formulation for Analysis of RC Structures

Based on Secant Stiffness, Ananth Ramaswamy, F. Barzegar and G. Z. Voyiadjis, EM Dec. 94, p2621-2640.

Predicting Creep and Shrinkage Effects in Cracked Concrete Elements, A. S. Prasada Rao, R. Jayaraman, V. Vimalanandam and S. Sai Babu, ST Sept. 94, p2784-

A Shape-Finding Finite Element Analysis for an Equally-Stressed Surface in Membrane Structures, T. J. Kwun, S. Y. Sur and H. W. Cho, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p724-731.

Shear-Stress Distribution in Symmetrically Tapered Cantilever Beam, Edwin P. Russo and Gregory Garic, ST Nov. 92, p3243-3249.

Stress and Settlement of Footings in Sand, Bengt H. Fellenius and Ameir Altaee, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1760-1773. Stress and Strain in Curved Noncracked Concrete Mem-

bers, Makoto Kawakami and Amin Ghali, ST Feb. 94, p527-537.

Stress-Deformation Behavior of an Embankment on Boston Blue Clay, Charles C. Ladd, Andrew J. Whittle and Dante E. Legaspi, Jr., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1730-1759.

Stress-Path Dependent Shear Strength of Sand, J. Feda, GT June 94, p958-974.

Stress-Strain Curves for Brick Masonry in Biaxial Compression, Krishna Naraine and Sachchidanand Sinha, ST

June 92, p1451-1461. Stresses in Anisotropic Rock Mass with Irregular Topogra-phy, Ernian Pan and Bernard Amadei, EM Jan. 94, p97-

Stresses Induced by Surficial and Deep Loading in Elastic Medium, Olivier Rossa and Gabriel Auvinet, GT Aug. 92, p1241-1246.

Structural Analysis of Pavements: State-of-the-Art, Yu T. Chou, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p958-963.

A Technique to Perform Coupled Consolidation Analysis Using Two Independent Softwares, Jichun Sun, Harianto Rahardjo and Delwyn G. Fredlund, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p849-856.

Temperature Effects on Rigid Pavements, I. E. Harik, P. Jianping, H. Southgate and D. Allen, TE Jan./Feb. 94,

650

Warping Stresses in Concrete Pavements on Pasternak Foundation, X. P. Shi, T. F. Fwa and S. A. Tan, TE Nov./Dec. 93, p905-913.

Stress analysis

Analysis of a Concrete Cylinder with a Composite Hoop Wrap, Christopher P. R. Hoppel, Travis A. Bogetti, John W. Gillespie, Jr., I. Howie and Vistasp M. Karbhari, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p191-198.

Concrete Beams with Externally Bonded Crabon Fiber Re-inforced Plastic (CFRP) Strips, R. L. Sierakowski, C. A. Ross, J. W. Tedesco and M. L. Hughes, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham,

ed., 1994), p139-146.

Extensions of Finite Element Dental Stress Analysis, Robert E. Efimba and E. M. Ahmed, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1928-

Investigation of Stress in a Circular Tunnel Due to Overburden and Thermal Loading of Horizontally Placed 21 PWR Multi Purpose Canisters, Nadia Kandalaft-Ladkany and Richard V. Wyman, (*High Level Radioactive Waste Management*, High Level Radioactive Waste Program Committee, 1994), p860-867.

New Ultrasonic Device Sounds Out Bridges, ET Dec.

94/Jan. 95, p9.

Role of Vortex-Excited Vibrations in Damage to Power Poles in Hurricane Andrew, Richard A. Skop and Ahmad H. Namini, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p567-576.

Scale and Modeling Effects in Concrete Armor Experiments, Jeffrey A. Melby and George F. Turk, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p686-700.

Shear Failure of Concrete Beams Reinforced with Plates, M. Arduini, A. D'Ambrisi and A. Di Tommaso, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p123-130.

Stress and Displacement of Thick Doubly Curved Laminated Shells, Chih-Ping Wu and Chi-Chuan Liu, EM July 94, p1403-1428

Stress concentration

High-Order Bending of Sandwich Beams with Transversely Flexible Core and Nonparallel Skins, D. Peled and Y. Frostig, EM June 94, p1255-1269.

Study of Stress Concentrations at the Intersection of Underground Chambers for the Superconducting Super Collider Project, Fwu-Ding (Kim) Lin, Lichu Guan and Steven Baldauf, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1975-1982.

Stress distribution

Determination of Geometry and Stress Distribution of an Optimal Stable Channel, Gregorio G. Vigilar, Jr. and Panayiotis Diplas, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p959-963.

LRFD vs. ASD for Wood Structures, David G. Pollock and Thomas G. Williamson, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p76-85.

Predicting Shallow Foundation Settlement in Sands from DMT, D. L. Skiles and F. C. Townsend, (Vertical and Horizontal Deformations of Foundations and Embank-ments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p132-142.

Settlement of an Air Cargo Structure on Soft Clay, Mazen E. Adib and William G. Paratore, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p875-886

Stress intensity factor

Dynamic Stress Intensity Factor for Subsurface Inclined Cracks, Chien-Ching Ma and Szu-Kuzi Chen, EM Mar. 94, p483-498.

Fracture Behavior of Cement Grouted Sand, C. Vipulanandan, A. Ata and S. Mebarkia, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p147-159.

Fracture Mechanics Analysis of Welded Joints Using Boundary/Finite Element Alternating Methods, Ruijia Mu and D. V. Reddy, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1920-1927.

Fracture Toughness of Compacted Cohesive Soils Using Ring Test, Jack A. Harison, Bobby O. Hardin and Kamyar Mahboub, GT May 94, p872-891.

Analysis of Glulam-FRP Beams by a Layer-Wise Formulation, Julio F. Davalos, Youngchan Kim and Somnath S. Sonti, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p67-75.

Deployable Mesh Reflector, Z. You and S. Pellegrino, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed.,

1994), p103-112.

Strain Measurement on the Runner of a Hydroelectric Turbine, K. Warren Frizell, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p416-424.

Stress relaxation

Generalized Creep and Stress Relaxation Model for Clays, Ronaldo I. Borja, GT Nov. 92, p1765-1786.

The Mechanics of Cracking in Embankment Dams, James R. Talbot, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p118-131.

Structural System Changes by Means of Forcedly Applied Restraints, Angelo Marcello Tarantino, EM Feb. 94, p392-399.

Stress strain relations

An Alternative Formulation of Volume-change Behavior of Soils, Sunirmal Banerjee and Kandiah Sribalaskandarajah, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p652-662.

Confining Reinforcement for Concrete Columns, S. Watson, F. A. Zahn and R. Park, ST June 94, p1798-1824.

Discrete-Element Method for Simulating Behavior of Cohesive Soil, A. Anandarajah, GT Sept. 94, p1593-1613.

Effect of Nonuniform Stresses on Measured DSS Stress-Strain Behavior, Don J. DeGroot, John T. Germaine and Charles C. Ladd, GT May 94, p892-912.

Finite Strain Consolidation for Vertical Drains, R. Robert Goughnour, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p688-700.

Load - Settlement Predictions for Spread Footing Event, Vincent Silvestri, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briand, ed. and Robert M. Gibbens, ed., 1994), p141-144

Load-Deformation Curves of Normal and High Strength Concrete for a Range of Height to Diameter Ratios, D. C. Jansen and S. P. Shah, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994),

Low-Cycle Fatigue Behavior of Reinforcing Steel, J. B. Mander, F. D. Panthaki and A. Kasalanati, MT Nov. 94,

p453-468.

Nonlinear Geometric and Material Behavior of Shell Structures with Large Strains, S. A. Schimmels and A. N. Palazotto, EM Feb. 94, p320-345. Study of Interaction Between Pneumatic Spherical and Cy lindrical Form Shells Subjected to Wind Pressure, D. Beilin and V. Polyakov, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1082-1093.

Testing Methods for Roof Systems, Phillip J. Smith, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p340-349.

Stress strain relations, soils Deformations in Granular Soils Due to Cyclic Loading, P. M. Byrne and J. McIntyre, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1864-1896. Hyperbolic Stress-Strain Parameters for Silts, Timothy D.

Stark, Robert M. Ebeling and Joseph J. Vettel, GT Feb.

94, p420-441.

Micromechanics Modeling for Stress-Strain Behavior of Granular Soils. II: Evaluation, Ching S. Chang, Mohammed G. Kabir and Yang Chang, GT Dec. 92, p1975-1992

Model Prediction of Anisotropic Behavior of Boston Blue Clay, Andrew J. Whittle, Don J. DeGroot, Charles C. Ladd and Tian-Ho Seah, GT Jan. 94, p199-224.

Prediction of Settlement for Five Footings, Ameir Altaee and Bengt H. Fellenius, (Predicted and Measured Be-havior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p206-

Procedures for Elastoplastic Liquefaction Modeling of Sands, A. Anandarajah, EM July 94, p1563-1587.

Settlement of Shallow Foundations on Sand, Harvey E. Wahls and Mukesh Gupta, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p190-206.

Application of Nondestructive Evaluation to Wood Poles, Ronald W. Anthony and Jozsef Bodig, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p669-676.

Dynamic Stress Intensity Factor for Subsurface Inclined Cracks, Chien-Ching Ma and Szu-Kuzi Chen, EM Mar. 94, p483-498.

Stress-strain curves

Stress-Strain Curves for Brick Masonry in Biaxial Com-pression, Krishna Naraine and Sachchidanand Sinha, ST June 92, p1451-1461.

Stressing

Response of Stressed Timber T - and Box-Beam Bridges, Hota GangaRao, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p701-706.

The Performance of Unconfined Hollow Fiber Membranes as Pipe Flow and Mixed Flow Aerators, Drew W. Johnson and Michael J. Semmens, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p106-113.

Isotope Systematics in Ground Water and Hydrogenic Deposits at ASPO, Sweden, Bill Wallin and Zell E. Peterman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2692-2701.

Isotopic Tracers of Gold Deposition in Paleozoic Lime-stones, Southern Nevada, Z. E. Peterman, B. L. Wid-mann, B. D. Marshall, J. N. Aleinikoff, K. Futa and S. A. Mahan, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1316-1323.

Strontium Isotope Geochemistry of Soil and Playa Deposits Near Yucca Mountain, Nevada, Brian D. Marshall and Shannon A. Mahan, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2685-2691.

Structural analysis

100 Years of Data Not Enough (ltr), CE Aug. 94, p31-32. Analysis and Computation of Old Truss Bridges, Beile Yin, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p32-47.

Analysis and Design of a Double Layer Barrel Vault with a Large Span, Ruo Jun Qian and Zu Yan Shen, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p401-408.

Analysis of Arch Dams, Alexander Michael Ansah, ST

May 93, p1516-1538.

Analysis of I-Girder Highway Bridges, Kassim M. Tarhini, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p684-687.

An Application of Inverse Problem Techniques to Spatial Structures, Pei Shan Chen, Mamoru Kawaguchi and Masaru Abe, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p113-122.

Application of Neural Networks in Vibrational Signature Analysis, M. F. Elkordy, K. C. Chang and G. C. Lee, EM

Feb. 94, p250-265.

Application of OOP and GUI to the Development of Edu-cational Software in Structural Mechanics, S. T. Mau and V. Aruna, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1273-1279.

Assessing Fitness for Purpose of Offshore Platforms. I: Analytical Methods and Inspections, H. Banon, R. G. Bea, F. J. Bruen, C. A. Cornell, W. F. Krieger and D. A. Stewart, ST Dec. 94, p3595-3612

Assessing Fitness for Purpose of Offshore Platforms. II: Risk Management, Maintenance, and Repair, H. Banon,

ST Dec. 94, p3613-3633.

Characteristics of the US Highway Bridge Population, Kenneth F. Dunker and Basile G. Rabbat, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1006-1013.

COAST Educational Program for Teaching Structural Analysis, Czeslaw J. Branicki and Jerzy W. Wekezer, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p327-332.

Combined Boundary Element / Finite Strip Analysis of Bridges, M. S. Cheung, Georges Akhras and W. Li, ST

Mar. 94, p716-727.

Computer Aided Design in Civil Engineering Based Upon the OODBMS ONTOS, Kartheinz Lehner and Dietrich Hartmann, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1419-1425.

Computer Applications in Structural Analysis and Design, J. A. Bohinsky and J. P. Lee, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p462-465.

Computing and Design in Structural Engineering A Practicing Engineer's Point of View, Richard A. Parmelee, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p369-376.

Computing in Analysis and Design in Structural Engineering Education, Practice and Registration - A Rationale for Dialogue, Subhash C. Anand, (Analysis and Compu-

 To Dialogue, Suoniasi C. Anania, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p357-361.
 Computing in Analysis and Design in Structural Engineering - An Educator's Point of View, John F. Fleming, (Analysis and Computation, Franklin Y. Cheng, ed.,

1994), p362-368.

Condition Assessment of Highway Bridges, Taner Aksel, Kuo-Liang Lee and Emin A. Aktan, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p1124-1130.

A Design for a Football Stadium Roof Enabling Growth of a Natural Grass Playing Surface: Sydney Football Stadium - Australia, G. S. Ramaswamy, D. S. Thomas, I. Nor-rie and L. Thorogood, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p28-37.

Discrete Field Stability Analysis of X-Braced Lattices, Raja R. A. Issa and R. Richard Avent, (Spatial, Lattice and Tension Structures, 10hn F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p450-459.

ed. and Cenna O. Penados, do., 1997. A Distributed Parameter Model for the Dynamic Analysis of Beam-like Structures with Varied Sectional Properties, Ji Yao Shen, Elias G. Abu-Saba, William M. Hes, J. Tao Shen, Erias G. Aou-Saoa, William M. McGinley, Lonnie Sharpe, Jr. and Lawrence W. Taylor, Jr., (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p110-123. Dynamic Interaction of Bridge and Moving Loading, A. Al-Sewaadi and A. Fafitis, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p77-93.

Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993, 0-87262-946-5,

Plastic Analysis of Cable Net Structures, J. I Meek, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba,

ed., 1994), p781-790.

Evaluation of Software for Analysis and Design of Rein-Evaluation of Software for Analysis and Design of Rein-forced Concrete Structures, Andrew D. Betaque and Kamal B. Rojiani, (Computing in Civil Engineering, Khalil Khozeimch, ed., 1994), p466-473.

First Bank Place: A Composite Cruciform Spine, P. V.

Banavalkar, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p134-139. Flange Local Buckling and Behavior of I-Sections, Iqbal S. Sohal and Liping Cai, (Analysis and Computation,

Franklin Y. Cheng, ed., 1994), p213-222.
Flat-Plate Repairs Using Innovative Shotcrete Applications, Avanti C. Shroff and Indrajit M. Mehta, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p971-982.

A Flexible Structural Analysis Method for Computer-Flexible Structural Analysis Breather for Company Aided Preliminary Design, Fang Zhao and Xiaogang Zeng, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1294-1301.

General Structure Representation for Neural Networks, George C. Lee and Mohamed F. Elkordy, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p47-56.

I.P.L. Space Trusses: Structural Performance and Analysis, M. Burt, D. Shriftailig, V. Babaev, A. Bogdanov and D. Beilin, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1075-1081.

Identification and Uncertainty Estimation of Structural Parameters, C. G. Koh and L. M. See, EM June 94, p1219-

1236.

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Imperfections and Thin-Walled Bars Behaviour, J. B. Obrebski and M. E. El-Awadi, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p310-319.

and Cenna O. Fenanoa, ed., 1994), p310-319.
Improved Wide-Column-Frame Analogy for Shear/Core
Wall Analysis, A. K. H. Kwan, ST Feb. 93, p420-437.
Innovative Design of Steel Gable Frames, Thomas Sputo,
(Structures Congress XII, N. C. Baker, ed. and Barry J.
Loodno, ed., 1994), p337-342.
Intermediate Support Cable Logging Systems, James W.
Charland, Alan G. Hernried and Marvin R. Pyles, (Spa-

tial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p791-800.

Large-Scale Computations in Analysis of Structures, D. B. McCallen and G. L. Goudreau, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p183-192.

Load-Deflection Behavior of Space-Based Inflatable Fabric Beams, J. A. Main, S. W. Peterson and A. M. Strauss, AS

Apr. 94, p225-238.

Needed: Old-Time Engineering (ltr), CE Apr. 94, p33.

A New Airlock Approach for Human Exploration, Stephen Capps, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p206-216.

ed., 1994), p200-210.
A New Laboratory for Teaching Structural Engineering, Richard A. Behr and David S. Vollenweider, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p321-326.

Non-Linear Solution Methods for Shell and Spatial Structures, M. Papadrakakis, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p180-189.

Nonlinear Analysis of Two-Layered Wood Members with

Nonlinear Analysis of two-Layered Wood Memoers with Interlayer Slip, Dan L. Wheat and Jose M. Calixto, ST June 94, p1909-1929. Nonlinear Behavior of Northlight Reinforced Concrete Shells, P. Srinivasa Rao and S. Duraiswamy, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John M. Lagrand and and Celline, II Denable, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p837-846.

Nonlinear Vibration Analysis of Steel Frames with Semirigid Connections, Siu Lai Chan and Goman Wai Ming Ho, ST Apr. 94, p1075-1087.

An Object-Oriented Approach to PC Finite-Element Solutions, Robert J. Lang, (Computing in Civil Engineering,

Khalil Khozeimeh, ed., 1994), p1236-1243. Object-Oriented Structural Analysis with Substructures, Richard Sause and Jun Song, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p153-160.

Optimization of Space Trusses on Vector Multiprocessor, H. Adeli and H.-L. Hsu, AS Jan. 94, p120-126. Performance and Analysis of Frames With "URM" Infills,

Khalid M. Mosalam, Peter Gergely and Richard N. White, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p57-66.

Phoenix Central Library: Reading Room Roof, Michael W. Ishler, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba,

ed., 1994), p38-46.

Practical Solution of the Flexibility to Stiffness Transformation Problem With a Mathematical Assistant for the Personal Computer, Thomas A. Lenox and Ronald W Welch, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1465-1472.

Ouick Checks for Structural Computer Analysis, Brian Brenner, Cindy Gagnon and C. K. Shah, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p2073-2080. RC Beam-Column Element for Nonlinear Frame Analysis. Enrico Spacone and Filip C. Filippou, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p155-164.

Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, (Orville T. Magoon, chmn.), 1994, 0-7844-0044-X, 443pp.

Vine 1. Magoon, Chini.), 1994, 67-84-004-A, 43-9p.
Reliability-Based Assessment of Corps Structures, Mary Ann Leggett, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed.

and Eugene L. Stakhiv, ed., 1994), p73-81.
Roof Space Frame Design of the C.K.S. Airport Passenger Terminal II, Yen-Po Chen and Hung-Tao Chao, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p57-66.

Seismic Analysis of Reinforced Concrete Building Using Finite-element Techniques, Tom Panayotido and Jayant Vir, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1091-1098.

Seismic Behavior of Non-Ductile Concrete Frame Structures, Yahya C. Kurama, Stephen P. Pessiki, Richard Sause and Shaojie Wu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1496-1501. Seismic Performance and Retrofit of the Golden Gate

Bridge, Charles Seim, Tim Ingham, Ph.D. and Santiago Rodriguez, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p763-771. Sensors and Techniques for Structural Monitoring, R. D.

Marshall, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1379-1384.

Simple Method for Approximate Analysis of Framed Tube Structures, A. K. H. Kwan, ST Apr. 94, p1221-1239. Simple Semi-Loof Element for Analyzing Folded-Plate Structures, K. Y. Sze, EM Jan. 94, p120-134. Simulating Structural Analysis with Neural Network, James 1. Powers CP Apr. 94, n252-265.

L. Rogers, CP Apr. 94, p252-265. Some Aspects of Compression Member Design in Australia, Murray J. Clarke and Russell Q. Bridge, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1587-1592.

Space Frame Solution for the Design of Large Pyramid Structures, T. J. DeGanyar, M. D. Griffin and M. R. Patterson, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p47-56.

Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994,

0-87262-953-8, 1115pp. Structural Analysis for Structural Design, D. E. Grierson, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p133-144.

Structural Analysis of Pavements: State-of-the-Art, Yu T. Chou, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p958-963.

Structural Assessment of Bomb Damage for World Trade Center, Ennala Ramabhushanam and Marjorie Lynch, CF Nov. 94, p229-242.

Structural Characteristics of the Danby Pipe Renovation System, Shuaib Ahmad and George McAlpine, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p239-246.

Structural Evaluation of Airfield Rigid Pavements Using Falling Weight Deflectometer, Boming Tang, TE May/

June 93, p467-476.

Structural Shape Analysis under the Prescribed Displace-ment Mode, Yasuhiko Hangai and Kazuaki Harada, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p694-703.

Structural System Changes by Means of Forcedly Applied Restraints, Angelo Marcello Tarantino, EM Feb. 94,

653

Structures Congress XII, 2 vols., N. C. Baker, ed. and Barry J. Loodno, ed., 1994, 0-87262-952-X, 1635pp.

A Study of Jointless Bridge Behavior, D. Siros and C rakos, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p485-490.

A Study on Buckling Characteristics of Single-Layer Latticed Domes with the Initial Geometrical Imperfection, Hwan-Mok Jung, Young-Hwan Kwon and Moon-Hwan-Mok Jung, Young-Irwan Kwon and Moon-Myung Kang, (*Spatial, Lattice and Tension Structures*, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p489-498.

Viscoplastic Response of Structures for Intense Local Heating, Earl A. Thornton and J. D. Kolenski, AS Jan. 94, p50-71.

Structural behavior

After the Quake: Why One Building Still Stands, CE June 94, p32,35.

Analysis and Design of a Double Layer Barrel Vault with a Large Span, Ruo Jun Qian and Zu Yan Shen, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p401-408.

Behavior of Two-Span Continuous Bridge Under Truck Axle Loading, Jane L. Tiedeman, Pedro Albrecht and

Lloyd R. Cayes, ST Apr. 93, p1234-1250.

Comparison of Two different Models of a Shell Roof, Oscar A. Andrés, Néstor F. Ortega and Carlos A. Schiratti, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p320-329.

The Danby Pipe Renovation System, George McAlpine, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p144-158.

Design of Low Rise Dome for the University of Hawaii at Manoa, Alfonso Lopez and Gerald, Orrison, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994),

The Effects of Bolt Over-Tightening on Bolted Connections, Edwin R. Schmeckpeper, Richard J. Nielsen and Guy Gentry, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p713-718.

Experimental Study on the Buckling Behavior of a Triodetic Aluminum Space Frame: No 2 Ultimate Bearing Strength of a Single Laver Space Frame, Kenichi Sugizake and Shigeru Kohmura, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p479-488.

Hurricane Andrew - Structural Performance of Buildings in South Florida, Edward L. Keith and John D. Rose, CF

Aug. 94, p178-191.

The Nature of Structural Morphology and Some Interdisci-plinary Examples, Ture Wester, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1000-1009.

654

Negative Shear Lag in Framed-Tube Buildings, Y. Singh and A. K. Nagpal, ST Nov. 94, p3105-3121.

Optumization for Earthquake Loads, Kevin Z. Truman and Franklin Y. Cheng, Analysis and Computation, Franklin Y. Cheng, ed., 1994), p123-132. The Plants Must Go On, CE May 94, p8. Seismic Behavior of Plain- and Reinforced-Masonry Buildings, Miha Tomaževič and Polona Weiss, ST Feb. 94, p323-338. Optimization for Earthquake Loads, Kevin Z. Truman and

Simulation Procedure for Buckling Behaviors of a Reticu-

lar Dome, Shiro Kato, Hideyuki Takashima, Isao Ku-bodera and Takashi Ueki, (*Spatial, Lattice and Tension Structures*, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p460-468.

Steel-Deck-Reinforced Concrete Diaphragms. I, W. Samuel Easterling and Max L. Porter, ST Feb. 94, p560-576.

Steel-Deck-Reinforced Concrete Diaphragms. II, W. Samuel Easterling and Max L. Porter, ST Feb. 94,

Structural Behavior of Polymer Concrete Beams Using Re-cycled Plastic, Karim S. Rebeiz, Sleiman P. Serhal and David W. Fowler, MT Feb. 94, p150-165.

Study of Two-Surface Plasticity Theory, Wei Jiang, EM Oct. 94, p2179-2200.

Time-Dependent Behavior of RC Members Strengthened With FRP Laminates, Nikolaos Plevris and Thanasis C. Triantafillou, ST Mar. 94, p1016-1042.

Torsional Response of Unsymmetric Buildings to Incoherent Ground Motions, G. D. Hahn and X. Liu, ST Apr. 94, p1158-1181.

Structural control

Continuous Pulse Control of Structures with Material Nonlinearity, Chris P. Pantelides and Paul A. Nelson, (Spa-tial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p300-309.

Digital Signal Processing Techniques for Active Structural Control, B. F. Spencer, Jr., P. Quast, S. J. Dyke and M. K. Sain, (Analysis and Computation, Franklin Y. Cheng,

ed., 1994), p327-336.

Discontinuous Control of Seismic-Excited Nonlinear and Hysteretic Structures, J. N. Yang, Z. Li and J. C. Wu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p393-398.

Feasibility Study of Adaptive Control of Structures Under Seismic Excitation, R. A. Burdisso, L. E. Suarez and C.

R. Fuller, EM Mar. 94, p580-592.

Frequency Domain Optimal Control Strategies for Aseismic Protection, B. F. Spencer, Jr., J. Suhardjo and M. K. Sain, EM Jan. 94, p135-158.

Hybrid Structural Control for Seismic Safety, Michael A. Riley, Haluk Aktan, Satish Nagarajaiah and Andrei M. Reinhorn, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p307-316.

Modal Filter Based Structural Control of a Highway Bridge, S. J. Shelley, E. A. Aktan and K. L. Lee, (Analysis and Computation, Franklin Y. Cheng, ed., 1994),

p347-356.

Modal Predictive Control of Structures. I: Formulation, F. López-Almansa, R. Andrade, J. Rodellar and A. M. Reinhorn, EM Aug. 94, p1743-1760.

Modal Predictive Control of Structures. II: Implementation, F. López-Almansa, R. Andrade, J. Rodellar and A. M. Reinhorn, EM Aug. 94, p1761-1772.

Optimal Configuration of Active-Control Mechanisms, Mohamed Abdel-Mooty and John Roorda, EM Mar. 94, p535-556

SemiActive Structural Control: A Low Cost Fix for An Infrastructure at Risk, C. C. Kuo, H. Wu, L. Liu, R.L. Sack, A. Ebrahimpour and W. N. Patten, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p387-392.

Some Applications of Neural Networks in Structural Engineering, Jamshid Ghaboussi, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p25-36.

Timing Analysis of a Multiprocessor Architecture for Active Control, John W. Baugh, Jr. and Wael M. Elseaidy, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p203-212.

Structural design Advances and Challenges in Case Based Design, Gerhard Schmitt, Simon F. Bailey and Ian F. C. Smith, (Comput ing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

Aesthetic Considerations in the Design of a Stack Extension, Howard I. Epstein and George Torello, Jr., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1238-1243.

After the Quake: Why One Building Still Stands (ltr), CE

Sept. 94, p28,30.

Akashi-Kaikyo Bridge Underconstruction, Fumio Nishino, Takeo Endo and Shin Kitagawa, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p779-780

Analysis and Design of a Double Layer Barrel Vault with a Large Span, Ruo Jun Qian and Zu Yan Shen, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994),

Application of Structural Optimization, M. Z. Cohn and A. S. Dinovitzer, ST Feb. 94, p617-650.

Augmented Lagrangian Genetic Algorithm for Structural Optimization, Hojjat Adeli and Nai-Tsang Cheng, AS Jan. 94, p104-118.

Automatic Truss Design by Optimized Growth, William Keith Rule, ST Oct. 94, p3063-3070.

Building the Perfect Ski Slope?, CE Mar. 94, p10.

The Challenge of Housing the Largest Detector, Prabir Das, C. J. Roth and Nachum Secker, *(Structures Congress XII*, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p755-760.

Combinatary Net-Shell Roofs of Elliptic Paraboloid of Zhaoqing Gymnasium, Fa-Kun Yao, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p642-651.

Computer Aided Design in Civil Engineering Based Upon the OODBMS ONTOS, Kartheinz Lehner and Dietrich Hartmann, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1419-1425.

Computer Applications in Structural Analysis and Design, J. A. Bohinsky and J. P. Lee, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p462-465.

Computing in Analysis and Design in Structural Engineer-ing Education, Practice and Registration - A Rationale for Dialogue, Subhash C. Anand, (Analysis and Compu-tation, Franklin Y. Cheng, ed., 1994), p357-361.

Computing in Analysis and Design in Structural Engineering - An Educator's Point of View, John F. Fleming, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p362-368.

Considerations for Design Criteria for Lunar Structures, Eric P. Steinberg and William Bulleit, AS Apr. 94, p188-198.

Critique - Manufactured Housing Session, Frank Walter, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p203-212.

Design Aids for Reinforced Concrete Columns, Bao-Jun Sun and Zhi-Tao Lu, ST Nov. 92, p2986-2995.

Design and Construction of the Cable-Stayed Wooden Space Truss Roof, Kei Sadakata and Hong Wan, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p810-819.

Design Basis for Creep in Composites Structures, Richard E. Chambers and Ayman S. Mosallam, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham,

ed., 1994), p265-271.

Design for Durability for Large Reinforced Concrete Shells, Wilfried B. Krätzig, Konstantin Meskouris and Karsten Gruber, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p897-906.

Design, Not Material, Dictates Earthquake Survival (ltr), CE Sept. 94, p36.

Developing Specifications for Cellular-Telephone Base Stations, John C. Woolery, CO Sept. 94, p593-602.

Dynamic Modal Responses of Wave-Excited Offshore Structures, G. D. Hahn and J. R. Sanghvi, EM Apr. 94,

Environmental Campus for EPA, Tod Rittenhouse, CE Oct. 94, p54-57.

Evaluation of Software for Analysis and Design of Reinforced Concrete Structures, Andrew D. Betaque and

forced Concrete Structures, Andrew D. Betaque and Kamal B. Rojiani, (Computing in Civil Engineering, Khalii Khozeimeh, ed., 1994), p466-473.
Expandable Structures with Incorporated Roofing Elements, J. P. Valcárcel, F. Escrig and E. Martín, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994),

p752-761.

Fabric Roof Design Responds to New Technologies, Craig G. Huntington, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p674-683.

First Bank Place: A Composite Cruciform Spine, P. V. Banavalkar, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p134-139

A Flexible Structural Analysis Method for Computer-Aided Preliminary Design, Fang Zhao and Xiaogang Zeng, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1294-1301.

Form Finding Numerical Methods for Tensegrity Systems, René Motro, Sihem Belkacem and Nicolas Vassart, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p704-713.

Genetic Algorithms in Discrete Optimization of Steel Truss Roofs, Vlasis K. Koumousis and Panos G. Georgiou, CP

July 94, p309-325.

Gothic Structure and Design: Narbonne Cathedral, Vivian Paul and Robert Warden, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1568.

Guidelines for Design of Joints between Steel Beams and Reinforced Concrete Columns, ASCE Task Committee on Design Criteria for Composite Structures in Steel and Concrete, ST Aug. 94, p2330-2357.

High-Strength Concrete Columns: State of the Knowledge, A. Azizinamini, P. Paultre and M. Saatcioglu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p444-449.

Influence of Membrane Forces on Transverse-Shear Reinforcement Design, Perry Adebar and Weishi He, ST Apr. 94, p1347-1366.

Interactive Cost Estimating During Design, Robert I. Carr, Hyun-Soo Lee and Photios G. Ioannou, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1556-1563.

LRFD vs. ASD for Wood Structures, David G. Pollock and Thomas G. Williamson, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p76-85.

Machine Learning of Design Rules: Methodology and Case Study, Tomasz Arciszewski, Eric Bloedorn, Ryszard S. Michalski, Mohamad Mustafa and Janusz Wnek, CP July 94, p286-308.

Making an Olympic Stadium and a Baseball Park, Scott W. Braley and David P. Tabor, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p188-

Masonry Carries the Load, Daniel P. Abrams, CE Feb. 93, p66-67.

Modeling of Cyclic Moment-Rotation Response of Double-Angle Connections, Mario De Stefano, Antonello De Luca and Abolhassan Astaneh-Asl, ST Jan. 94, p212-229.

Modeling to Generate Alternatives in Discrete Structural Optimization, John W. Baugh, Jr., E. Downey Brill, Jr. and Shannon C. Caldwell, (Computing in Civil Engi-neering, Khalil Khozeimeh, ed., 1994), p310-317.

Multimedia Approach to Case-Based Structural Design, Mary Lou Maher and Bala Balachandran, CP July 94, p359-376.

Object-Oriented Modeling of Design System for RC Buildings, Žiga Turk, Tatjana Isaković and Matej Fischinger, CP Oct. 94, p436-453. On some Problems of the Multicriteria Optimization of the Spatial Grid Structures, Jan A. Karczewski and Witold M. Paczkowski, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p162-171.

One Ninety One Peachtree and NationsBank: Composite Additions to the Atlanta Skyline, P. V. Banavalkar and J. P. Colaco, (Structures Congress XII, N. C. Baker, ed.

and Barry J. Loodno, ed., 1994), p170-175.

Phoenix Central Library: Reading Room Roof, Michael W. Ishler, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p38-46.

A Practical Design and Construction of Tension Rod Supported Glazing, Toru Takeuchi, Haruyuki Kitamura, Kimiaki Harada, Kohei Higuchi, Akiho Harada and Mamoru Iwata, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p684-693

Predicting Strength Variability of Concrete Offshore Structures, Perry Adebar, Ricardo Foschi and Felix Yao, ST

July 94, p2108-2122.

A Quasicrystal for Denmark's Coast, Tony Robbin, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1045-1052.

Rational Limits for Longitudinal Steel in Concrete Columns, ASCE-ACI Committee 441-Concrete Columns, Subcommittee on Longitudinal Reinforcement Limits, (Furlong, Richard W., chmn.), (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p438-443.

Recent Advances in Biaxially Loaded Columns, ASCE-Advances in Biaxiany Loaded Columns, Asc.E-ACI Committee 441, Subcommittee on Biaxially Loaded Columns, (Hsu, C. T. T., chmn.), (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p450-454.

Representation of Case Memory for Structural Design, Mary Lou Maher, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2030-2037.

Roof Space Frame Design of the C.K.S. Airport Passenger Terminal II, Yen-Po Chen and Hung-Tao Chao, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p57-66.

Seismic Issues in Structural Engineering Codes and Practice, Vilas Mujumdar, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1214-1219.

Sensitivity and Optimum Structural Design, Witold Gut-kowski and Jacek Bauer, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p330-339.

Spacecraft Wall Design for Orbital Debris Impact, Shyh-Rong Tzan and Chris P. Pantelides, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p378-387 Spatial, Lattice and Tension Structures, John F. Abel, ed.,

John W. Leonard, ed. and Celina U. Penalba, ed., 1994. 0-87262-953-8, 1115pp.

Specification Needs for FRP Composite Products, Craig A. Ballinger, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p56-63.

Standard for the Structural Design of Composite Slabs (ANSI/ASCE 3-91) Standard Practice for Construction and Inspection of Composite Slabs (ANSI/ASCE 9-91) (St No. 91-003, 91-009), American Society of Civil Engineers, 1994, 0-87262-954-6, 90pp.

Structural Analysis for Structural Design, D. E. Grierson, (Analysis and Computation, Franklin Y. Cheng, ed.,

1994), p133-144.

Structures Congress XII, 2 vols., N. C. Baker, ed. and Barry J. Loodno, ed., 1994, 0-87262-952-X, 1635pp.

Tensile Structures Highlight New Denver Airport, Horst Berger and Edward M. DePaola, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard,

ed. and Celina U. Penalba, ed., 1994), p957-968.
Topology Optimization of Plate and Shell Structures, K. Maute and E. Ramm, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p946-955. Toward Integrated Models for Structural Design, Namhee K. Hong and Richard Sause, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1310-1317.

The Use of ETFE Foils in Lightweight Roof Constructions, Craig Schwitter, (Spatial, Lattice and Tension Struc-tures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p622-631.

"A New Way of Teaching Structural Engineering With the 'AN/EX' Mini-Laboratory", Richard A. Behr, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1571.

Structural dynamics

Bridge Buffeting by Skew Winds in Erection Stages, Robert H. Scanlan, EM Feb. 93, p251-269.

Comparison of Donnell and Higher Order Nonlinear Models for Dynamically Loaded Composite Plates and Shells, Arthur E. Forral and Anthony N. Palazotto, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994),

Concurrent E-I Algorithm in Structural Dynamics, E. D. Sotelino, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p169-176.

Dynamics of Nuclear Power Plant Structures with Foundation Interaction, Samir J. Serhan, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p55-60.

Element Identification of Member Properties of Framed Structures, Andres W. C. Oreta and Tada-aki Tanabe, ST July 94, p1961-1976.

Improving Dynamic Finite Element Models Using Test Data, N. S. Khot and D. E. Veley, (Engineering, Con-struction, and Operations in Space IV, Rodney G. Gal-loway, ed. and Stanley Lokaj, ed., 1994), p18-26.

Modal Interaction in the Response of Laminates, Jamal F. Nayfeh, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p89-98

Modal Predictive Control of Structures. I: Formulation, F. López-Almansa, R. Andrade, J. Rodellar and A. M. Reinhorn, EM Aug. 94, p1743-1760.

Modal Predictive Control of Structures. II: Implementation, F. López-Almansa, R. Andrade, J. Rodellar and A. M. Reinhorn, EM Aug. 94, p1761-1772.

Optimal Configuration of Active-Control Mechanisms, Mohamed Abdel-Mooty and John Roorda, EM Mar. 94, p535-556.

Optimal Design of Base-Isolated Structures with Dynamic Absorbers, S. C. Sinha and Guangning Li, EM Feb. 94,

Space Station Microgravity Analysis and Assessment, John P. Wetzel, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p463-472.

Teaching Structural Loading: A Case Study, R. Panneer Selvam, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1375-1378.

Viscous Damping in Inelastic Structural Response, Dionisio Bernal, ST Apr. 94, p1240-1254.

Structural elements

Analysis of Structural Debris Generation and Disposal After Hurricane Andrew: Technical Perspective, Berrin Tansel, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p533-538.

Application of High-Performance Steel in New and Retrofit Structures, Robert J. Dexter, Le-Wu Lu and John W. Fisher, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p336-343.

COAST Educational Program for Teaching Structural Analysis, Czesław J. Branicki and Jerzy W. Wekezer, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p327-332.

Consequential Fire Loads on Structures, Donald O. Dusenberry, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p996-1001.

Large Deformation Theory Using Truncated Rotations, Daniel A. Miller and Anthony N. Palazotto, (Engineering, Construction, and Operations in Space IV, Rodney Galloway, ed. and Stanley Lokaj, ed., 1994), p137-146

Masonry Carries the Load, Daniel P. Abrams, CE Feb. 93, p66-67.

656

Predicting Creep and Shrinkage Effects in Cracked Concrete Elements, A. S. Prasada Rao, R. Jayaraman, V. Vimalanandam and S. Sai Babu, ST Sept. 94, p2784-

Structural engineering

After the Quake: Why One Building Still Stands, CE June 94, p32,35.

AISC's Higgins Award Goes to Griffis, NE May 94, p14. Anton Tedesko, Designer of Major Engineering Structures in Concrete and Steel, Dies at 90, NE May 94, p5.

Application of Computer-Aided Structural Engineering, Tony Tascione, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p238-247.

An Automated Environment for Parallel Computing, E. D. Sotelino, D. W. White and W. F. Chen, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p193-202. Bridging the Gap Between Architecture and Engineering,

Thomas L. Harrison, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1256-1261. Checking of CAD Drawings for Fabrication Issues, Jay Ernst and W. M. Kim Roddis, (Analysis and Computa-

tion, Franklin Y. Cheng, ed., 1994), p248-253.

Computer-Aided Structural Engineering Software: The Status of Concurrent Engineering, Thomas E. Fenske, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p230-237.

Computing and Design in Structural Engineering A Practicing Engineer's Point of View, Richard A. Parmelee, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p369-376.

Computing in Analysis and Design in Structural Engineering Education, Practice and Registration - A Rationale for Dialogue, Subhash C. Anand, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p357-361.

Computing in Analysis and Design in Structural Engineer-ing - An Educator's Point of View, John F. Fleming, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p362-368.

Computing in Analysis and Design in Structural Engineering Education, Practice and Registration: A View from the National Council of Examiners for Engineering and Surveying, J. Earl Herndon, Jr., (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p377-385.

Cooper Is 1993 FHWA Engineer of the Year, NE May 94, p14.

Creating Construction Documents from 3-D Computer Models, Margaret T. Neggers, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1326-1331. Design and Construction of Shielded Lunar Outpost, S. D.

Jolly, J. Happel and S. Sture, AS Oct. 94, p417-434. Educating A Structural Engineer, J. A. Bohinsky and J. P. Lee, (Structures Congress XII, N. C. Baker, ed. and

Barry J. Loodno, ed., 1994), p1352-1357. The Engineer As Preservationist, Marie Ennis, CE Sept. 94, p48-51.

Experiences with an Undergraduate Structural Engineering Laboratory, Stephen Pessiki, Le-Wu Lu and Ben T. Yen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1369-1374.

Heat-Straightening Repair of Damaged Steel, R. Richard Avent, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1194-1202.

Integrated Automation Systems in Structural Engineering Song Fong Jan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1318-1325.

Minimum Design Loads for Buildings and Other Structures (ASCE 7-93), Revision of ANSI/ASCE 7-88 (St No. 93-007), American Society of Civil Engineers, 1994, 0-87262-904-X, 135pp.

Multimedia Implications to Structural Engineering, Nelson C. Baker and Omar El Kordy, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p37-46. A New Laboratory for Teaching Structural Engineering, Richard A. Behr and David S. Vollenweider, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p321-326.

The Northridge Warning Has 3-D Design Been Lost?, CE

An Object-Oriented Approach for Reinforced Concrete Design, Ajay B. Kulkarni and Kamal B. Rojiani, (Com-puting in Civil Engineering, Khalil Khozeimeh, ed., 1994), p161-168.

PC Networking - A Case Study, Chester J. Zaremba, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1867-1873.

Qualification System for Building Engineers in Japan, Katsumi Yano, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p211-214.

Qualification System for Building Engineers in Korea, Li-Hyung Lee and Waon-Ho Yi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p215-

Recent Advances in Engineering Design Methodologies, Steven J. Fenves, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p14-24.

Representation and Processing of Design Standards: a Bifurcation between Research and Practice, Steven J. Fenves, James H. Garrett and M. Maher Hakim, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p122-127.

Representing Design Cases Based on Methods, B. Raphael, B. Kumar and I. A. McLeod, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p255-292.

Restoring Freedom at the Capitol Dome, James R. Cagley, CE June 94, p57-59. The Role of SEAOH in the Post-Iniki Rebuilding and Recovery Effort, Howard K. C. Lau and Michael K. H. Yee, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p278-283.

Seismic Issues in Structural Engineering Codes and Practice, Vilas Mujumdar, (Structures Congress XII, N. C.

Baker, ed. and Barry J. Loodno, ed., 1994), p1214-1219. Some Applications of Neural Networks in Structural Engineering, Jamshid Ghaboussi, (Analysis and Computa-tion, Franklin Y. Cheng, ed., 1994), p25-36. Spatial, Lattice and Tension Structures, John F. Abel, ed.,

John W. Leonard, ed. and Celina U. Penalba, ed., 1994,

0-87262-953-8, 1115pp.

Structures Congress XII, 2 vols., N. C. Baker, ed. and Barry J. Loodno, ed., 1994, 0-87262-952-X, 1635pp.

Ultimate Strength of R/C Cooling Tower Shell, Takashi Hara, Shiro Kato and Hiroshi Nakamura, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p877-

When are Loads Taught? A Case Study and National Trends. Richard J. Schmidt, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1358-

1363

Where do the Arrows Come From? Evaluating Structural Loads, Duane S. Ellifritt, (Structures Congress XII, N. C Baker, ed. and Barry J. Loodno, ed., 1994), p1364-1368.

"A New Way of Teaching Structural Engineering With the 'AN/EX' Mini-Laboratory", Richard A. Behr, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1571.

Structural failures

Brief History of the Port of Sines and General Presentation of West Breakwater, Manuel Dinis C. Dias and Jeno F. Toppler, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p3-24.

Distress in Prestressed Concrete Roof Girders at a Cement Plant, W. P. S. Dias, A. D. C. Jayanandana, M. C. M. Fonseka and A. A. D. A. J. Perera, CF Feb. 94, p6-15.

Evaluation of Design Wind Loads for Manufactured Homes and Needed Improvements, R. D. Marshall, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p185-194.

Evaluations and Revisions of the Design, F. Abecasis and C. Pita, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p302-326.

Failure of the Turkey Point Unit 1 Reinforced Concrete Chimney During Hurricane Andrew, W. F. Brannen, T. D. Joseph, Randolph W. Snook and Robert A. Porthouse, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p405-414.

Fires Deemed to Have Tested Structural Performance, Paul R. De Cicco, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p990-995.

Hurricane Andrew's Effect on Manufactured Housing, Mike Mafi, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and

Mehrdad Sotani, ed., 1994), p158-165.

Impact of Hurricane Andrew on Electrical Generating Fa-cilities, W. F. Brannen, R. L. Adams and J. E. Sheetz, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p397-404.

Late Stage Damage in G30-500/PMR-15 Laminates, Wieslaw K. Binienda, Anping Hong, Andrew Gyekenyesi and John Hemann, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p316-325.

Membrane Structures: Technological Innovation and Architectural Opportunity, Edmund Happold, (Spatial, Lat-tice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p547-

Overview of the Sines West Breakwater Reconstruction, Orville T. Magoon, (Reconstruction of the West Break-water at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p1-2.

Performance of Commercial Masonry Structures in Hurri-cane Andrew, Geoffrey W. Blaney, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p456-464.

Response of Space Trusses During Progressive Failure, George E. Blandford and Shien T. Wang, (Dynamic Re-sponse and Progressive Failure of Special Structures,

Ramesh B. Malla, 1993), p1-16.

Sewerage Failure, Diagnosis and Rehabilitation, J. W. Del-(Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p11-28.

Structural Failure and Quality Assurance of Space Frames, Tien T. Lan, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U.

Penalba, ed., 1994), p123-132.

Wind Resistance of Conventional Light-Frame Buildings, Ronald W. Wolfe, Ramon M. Riba and Mike Triche, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p652-662.

Structural forms

Structural Character of the Northern Segment of the Paintbrush Canyon Fault, Yucca Mountain, Nevada, Robert P. Dickerson and Richard W. Spengler, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p.2367-2372.

The Sundance Fault: A Newly Recognized Shear Zone at Yucca Mountain, Nevada, R. W. Spengler, C. A. Braun, L. G. Martin and C. W. Weisenberg, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p2359-2366.

Structural materials

Analysis of Inflating Habitable Space Structures with neomass (near-Earth-object mass), Anthony Zuppero, Nancy Linarez-Royce and Pat Whitman, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p247-256.

Construction of Large Lunar Structures by Fusion Welding of Sintered Regolith, R. S. Crockett, B. D. Fabes, T. Nakamura and C. L. Senior, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1116-1127.

Development, Testing and Modeling of Ceramic Compos-ites for Lunar Applications, János C. Tóth and Chandra S. Desai, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj,

ed., 1994), p358-367.

Fabric Roof Design Responds to New Technologies, Craig G. Huntington, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U.

Penalba, ed., 1994), p674-683.

Fabric Structures for Public Buildings, Horst Berger, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p583-591.

The Georgia Dome and Beyond: Achieving Lightweight Longspan Structures, Matthys P. Levy, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p560-

Helium-Supported Hangar for a Small Solar-Powered Airship, Rosemarie Wagner and Bernd Kröplin, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p592-601.

Optimal Design of Structural Concrete Bridge Systems, M. Z. Cohn and Z. Lounis, ST Sept. 94, p2653-2674.

Wall Relief and Three Dimensional Suspension Sculpture Utilizing Tension and Membrane Structures, Warren Seelig, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p602-611.

Structural members

Advanced Nonlinear Formulation for Reinforced Concrete Beam-Columns, B. A. Izzuddin, C. G. Karayannis and A. S. Elnashai, ST Oct. 94, p2913-2934.

Compression-Member Models for Space Trusses: Review, Erling Murtha-Smith, ST Aug. 94, p2399-2407

Computer Applications in Structural Analysis and Design, J. A. Bohinsky and J. P. Lee, (Computing in Civil Engi-

neering, Khalil Khozeimeh, ed., 1994), p462-465. Design Implications of Advanced Analysis in LRFD, J. Y. Richard Liew and W. F. Chen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1167-1172.

Dynamic Effects of Progressive Member Failure on the Response of Truss Structures, Ramesh B. Malla, Baihai Wang and Butchi B. Nalluri, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p60-76.

Element Identification of Member Properties of Framed Structures, Andres W. C. Oreta and Tada-aki Tanabe, ST

July 94, p1961-1976.

Finite Element Method for Buckling Analysis of Plate Structures, Chee-Kiong Chin, Faris G. A. Al-Bermani and Sritawat Kitipornchai, ST Apr. 93, p1048-1068.

How to Optimize Light-Gage, Cold-Formed Steel Beam Scott A. Burns, (Analysis and Computation, Franklin Y.

Cheng, ed., 1994), p104-112.

Improving Dynamic Finite Element Models Using Test Data, N. S. Khot and D. E. Veley, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p18-26.

Moment-Curvature Relationships for Dented Tubular Sections, L. Duan, J. T. Loh and W. F. Chen, ST Mar. 93,

p809-830.

On the Dynamics and Control of Flexible Orbiting Systems: An Approach with Application, V. J. Modi and A. Suleman, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1-17.

Proposed Rehabilitation of Storrow Drive Interchange Tunnel, Frank J. Heger, Atis A. Liepins and Paul L. Kelley, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1111-1118. Response of Space Trusses During Progressive Failure, George E. Blandford and Shien T. Wang, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p1-16.

Strength of FRC Corbels in Flexure, Nijad I. Fattuhi, ST

Feb. 94, p360-377. Stress and Strain in Curved Noncracked Concrete Members, Makoto Kawakami and Amin Ghali, ST Feb. 94, p527-537.

Torsion of Regular Multicellular Members, Donald L. Dean, ST Dec. 94, p3675-3678.

Structural models

"A New Way of Teaching Structural Engineering With the 'AN/EX' Mini-Laboratory", Richard A. Behr, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1571.

Structural programming

Optimization of Controlled Structures: Using H., Theory, N. S. Khot and D. E. Veley, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p266-275.

Structural reliability

Assessing Fitness for Purpose of Offshore Platforms. I: Analytical Methods and Inspections, H. Banon, R. G. Bea, F. J. Bruen, C. A. Cornell, W. F. Krieger and D. A. Stewart, ST Dec. 94, p3595-3612.

Assessing Fitness for Purpose of Offshore Platforms. II: Risk Management, Maintenance, and Repair, H. Banon, ST Dec. 94, p3613-3633.

Comprehensive Reliability Analysis of Prestressed Concrete Beams, A. S. Al-Harthy and D. M. Frangopol, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p193-198.

Damage Tolerance Analysis in Structural Rehabilitation, Charles J. Hookham, (Analysis and Computation, Frank-

lin Y. Cheng, ed., 1994), p94-103. Distributional Information for Ejection Fragments, Eric P. Steinberg, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p402-413.

Fast Monte Carlo Simulations and Safety Index Checking,

Fast Monte Carlo Simulations and Sarety Index Checking, A. Sellier and A. Mébarki, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p260-265. Human Error Models for Structural Reliability, Eric P. Steinberg, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p199-204. Hyperspace Division Method for Structural Reliability, Sa-

toshi Katsuki and Dan M. Frangopol, EM Nov. 94,

p2405-2427.

Impact of Non-Gaussian pdf on Reliability Estimates for Deep Water Platforms, John M. Niedzwecki, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1463-1465.

Integration of Reliability, Uncertainty and Optimization in Hydraulics Systems: Structural Reliability, Kevin E. Lansey, Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel,

ed., 1994), p266-269.

Maintaining Reliability of Concrete Structures. I: Role of Inspection/Repair, Yasuhiro Mori and Bruce R. Elling-

wood, ST Mar. 94, p824-845.

Maintaining Reliability of Concrete Structures. II: Optimum Inspection/Repair, Yasuhiro Mori and Bruce R. Ellingwood, ST Mar. 94, p846-862.

Mechanistic Model for Transition Probabilities, K. H. Chua and C. L. Monismith, TE Jan./Feb. 94, p144-159.

Model-Correction-Factor Method in Structural Reliability,

Ove Ditlevsen and Torben Arnbjerg-Nielsen, EM Jan. 94, p1-10.

Orthogonal Series Expansions of Random Fields in Reliability Analysis, Jun Zhang and Bruce Ellingwood, EM Dec. 94, p2660-2677.

Reexamination of Convex Polyhedron Outcrossing Problem, Ove Ditlevsen, EM Mar. 94, p654-660.

Reliability Assessment of Prestressed Concrete Beams, Ali S. Al-Harthy and Dan M. Frangopol, ST Jan. 94, p180-

Reliability of Structures for the Moon, Haym Benaroya, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p166-175. Reliability-Based Design of Prestressed Concrete Beams, Ali S. Al-Harthy and Dan M. Frangopol, ST Nov. 94, p3156-3177.

Second-Order Upper Bounds on Probability of Intersection of Failure Events, Qiang Xiao and Sankaran Mahadevan, EM Mar. 94, p670-674.

Sensitivity-Based Weighted-Average in Structural Damage Assessment, P. C. Pandey and S. V. Barai, CF Nov. 94, p243-263.

Structural Reliability Analysis of Masonry Shear Walls, George T. Zorapapel, Gary C. Hart and Dan M. Frango-pol, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p205-210.

Substantiated Risk Assessment of Jacket Structure, P. S. Tromans and J. W. van de Graaf, WW Nov/Dec. 94, p535-556.

Structural response

An Application of a Coulomb Damped Mass Device, Apostolos Fafitis and Debra S. Larson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p399-404.

Concrete Buildings in Regions of High Seismicity, S. K. Ghosh, (Structures Congress XII, N. C. Baker, ed. and

Barry J. Loodno, ed., 1994), p31-36. Dynamic Characteristics of Translational Lattice Domes, Celina U. Penalba, (Spatial, Lattice and Tension Struc-tures, John F. Abel, ed., John W. Leonard, ed. and Celina

U. Penalba, ed., 1994), p269-279. Dynamics of Nuclear Power Plant Structures with Founda-

tion Interaction, Samir J. Serhan, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994),

Estimation of Structural Damping of Buildings, Yukio Tamura, Masaaki Yamada and Haruhiko Yokota, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1012-1017.

Evaluation of Roof Sheathing Fastening Schedules for High Wind Uplift Pressures, Thomas P. Cunningham, Jr., (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad

Sotani, ed., 1994), p330-339. Fabric Roof Design Responds to New Technologies, Craig G. Huntington, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U.

Penalba, ed., 1994), p674-683. Generalized Optimal Active Control with Embedded and Half-space Soil-Structure Interaction, F. Y. Cheng, S. Suthiwong and P. Tian, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p337-346.

Ground-Motion Spatial Variation Effects on Circular Arch Responses, Hong Hao, EM Nov. 94, p2326-2341. The Inelastic Response of an Offshore Platform in Hurri-

cane Andrew, Gary R. Imm, Patrick E. O'Connor and James M. Light, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p7-12.

Lateral Cyclic Response of Pile in Viscoelastic Winkler Subgrade, Shintaro Yao and Toyoaki Nogami, EM Apr. 94, p758-775.

Mechanics of Curved Fiber Bundles in Composites, David W. Jensen, Suresh P. Pai, Timothy R. Pickenheim and Colleen M. McCarty, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p276-286.

Prediction of Structural Response to Large Earthquakes by Using Recordings From Smaller Earthquakes, Erdal Safak, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1391-1396.

Progress in Reinforced Concrete Column Design: An Introduction, S. Ali Mirza, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p429-431.

Reliability of Uncertain Nonlinear Trusses Under Random Excitation. II, R.-H. Cherng and Y. K. Wen, EM Apr.

Reliability of Uncertain Nonlinear Trusses Under Random Excitation. I, R.-H. Cherng and Y. K. Wen, EM Apr. 94,

Resistance Mechanisms in RC Building Frames Subjected to Column Failure, Haluk Sucuoğlu, Ergin Çıtıpıtuoğlu and Sinan Altın, ST Mar. 94, p765-782.

Scale and Modeling Effects in Concrete Armor Experiments, Jeffrey A. Melby and George F. Turk, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p686-700.

Seismic Design of RC Structural Walls with Unsymmetrical Cross-Sections, John W. Wallace and Sharon L. Wood, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p43-48.

Seismic Fragility Analysis of Sheahan Pumping Building, Howard H. M. Hwang, Ah Lim Ch'ng and Hui-Mi Hsu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1006-1011.

Sensors and Techniques for Structural Monitoring, R. D. Marshall, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1379-1384.

Statistical Response of a Class of Hysteretic Systems, I. I. Orabi and G. Ahmadi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p405-410.

Statistically-Based Evaluation of Homes Damaged by Hur-ricanes Andrew and Iniki, Jay H. Crandell, Mark T. Gibson, Edward M. Laatsch, Mark S. Nowak and J. Albert vanOvereem, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p519-528.

Structural Performance of a Multipurpose Canister Shell for HLNW Under Normal Handling Conditions, Samaan G. Ladkany and Rajkumar Rajagopalan, (High Level Ra-dioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p984-992.

Structural Response to 3D Simulated Earthquake Motions in San Bernardino Valley, Erdal Şafak and Arthur Frankel, ST Oct. 94, p2820-2839.

A Survey of Building Performance in Hurricane Iniki and Typhoon Omar, James W. Sheffield, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994),

Thermal Stresses in Piezoelectric Materials: A Boundary Integral Formulation, J. S. Lee and L. Z. Jiang, (Engi neering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994),

Structural safety

A Comparison of Spent-Fuel Shipping Cask Response to 10 CFR 71 Normal Conditions and Realistic Hot Day Extremes, Steven James Manson and Steven Eric Gianoulakis, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p788-795.

Corrosion Scenario Development for Corrosion Lifetime Prediction of Carbon Steel Used for Geological Disposal Package, Takanori Fukuda, Guen Nakayama Masatsune Akashi, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p977-983.

Dynamic Simulation of Tractor-Trailer-Cask System Used in Nuclear Waste Transportation, Zekai Čeylan and Cahit Evrensel, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p934-941.

Hurricane Shelter Design Criteria for Public Schools, Ajay Shanker, R. Wayne Drummond, Raja R. Issa and Kalika Wamanacharya, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p233-240.

Implementation of Passive Energy Dissipation Systems in the United States, Andrew S. Whittaker and Ian D. Aiken, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1280-1285.

The Northridge Question: Can We Do Better?, CE May 94,

One Engineer's Wish List for Hurricane Hazard Mitigation, Ronald F. Zollo, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p268-277.

Overweight Trucks and Safety of Bridges, Gongkang Fu and Osman Hag-Elsafi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p284-289.

Reinforced-Concrete Dimensioning Based on Element Nodal Forces, E. Anderheggen, Z. Despot, P. Steffen and S. M. R. Tabatabai, ST June 94, p1718-1731.

Safety Assessment of a Chemical Reactor Vessel, A. Wiedermann, A. Longinow and F. Calabrese, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1-6.

Sensitivity and Optimum Structural Design, Witold Gutkowski and Jacek Bauer, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and

Celina U. Penalba, ed., 1994), p330-339

Synopsis of a Manual on Structural Fire Protection, T. T. Lie and E. L. Schaffer, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1002-1005.

Towards Structural Strength and Safety Evaluation Within Bridge Management Systems, George Hearn, Dan M. Frangopol and Milanendu Chakravorty, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p290-295.

Structural settlement

Evaluation of In-Place Wetting Using Soil Suction Measurements, Kenneth D. Walsh, William N. Houston and Sandra L. Houston, GT May 93, p862-873.

Soil Improvement to Mitigate Settlements under Existing Structures, H. R. Al-Alusi, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1214-1223.

Tree Root Induced Settlement of a Large Industrial Building Founded on Expansive Clay-A Case History, Aziz Aboaziza and Hisham H. H. Mahmoud, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1472-1481.

Structural stability

Buckling of Plates with Stiffening Elastically-Restrained Edges, Raymond H. Plaut and Ardéshir Guran, EM Feb. 94, p408-411.

Design Implications of Advanced Analysis in LRFD, J. Y. Richard Liew and W. F. Chen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994),

p1167-1172.

Design of Low Rise Dome for the University of Hawaii at Manoa, Alfonso Lopez and Gerald, Orrison, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p393-400.

Fabrication and Testing of High Strength, High Capacity, Weight Optimized Trailers, Chad Taylor, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p931-933.

Following the Geotechnical Studies of the Breakwater at Sines; Hydro-Geotechnical Stability of Breakwaters, Frans B. J. Barends and Jack Hagenaar, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p124-167.

Impact of Non-Gaussian pdf on Reliability Estimates for Deep Water Platforms, John M. Niedzwecki, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p1463-1465.

Instantaneous Optimal Control of Building Frames, C. C. Chang and Henry T. Y. Yang, ST Apr. 94, p1307-1326.

Recent Advances in Precision Surveying Technology and Integrated Deformation Analysis, Adam Chrzanowski, W. Trevor Greening and Anna Szostak-Chrzanowski, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

Seismic Performance and Retrofit of the Golden Gate Bridge, Charles Seim, Tim Ingham, Ph.D. and Santiago Rodriguez, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p763-771.

Semiactive Motion Control Using Variable Stiffness, David C. Nemin, Yingjie Lin and Roberto A. Osegueda, ST Apr. 94, p1291-1306.

Stability of Masonry Piers and Arches Including Sliding, Thomas E. Boothby, EM Feb. 94, p304-319.

A Study on Buckling Characteristics of Single-Layer Latticed Domes with the Initial Geometrical Imperfection, Hwan-Mok Jung, Young-Hwan Kwon and Moon-Myung Kang, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p489-498.

Penaina, et., 1944, p469-4996.
West Breakwater Sines Definitive Rehabilitation, General Concept, H. Ligteringen, F. Silveira Ramos, J. W. van der Meer and M. Rita, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p168-186.

Structural steels

CADD Utilities for the Structural Designer, Ranjit A. Sahair, CC Mar. 94, p1,2-5.

Columnless in Chicago, Daniel A. Cuoco, Udom Hungspruke and Robert P. DeScenza, CE Nov. 94, p42-

Malaysia's Twins: High-Rise, High Strength, Rita Robison, CE July 94, p63-65.

Multimedia Technology and Structural Steel Design, Abbas Aminmansour, (Structures Congress XII, N. Baker, ed. and Barry J. Loodno, ed., 1994), p315-320.

A Reliability Model for Fatigue and Corrosion of Hydrau-lic Steel Structures, Joseph Padula, Cameron Chasten, Paul Mlakar and Reed Mosher, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1217-1224.

SteelDEM: An Interactive Multimedia Intelligent Tutor and Teaching Aid for Structural Steel Design, Abbas Aminmansour, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p1458-1464.

U.S. / Japan Large Scale Cooperative Research Program for Steel Structures, Robert D. Hanson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p103-108.

Structural strength

Design Implications of Advanced Analysis in LRFD, J. Y. Richard Liew and W. F. Chen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1167-1172.

High-Strength Concrete Columns in High-Rise Buildings, Murat Saatcioglu, (Structures Congress XII, N. C. Baker,

ed. and Barry J. Loodno, ed., 1994), p37-42. Towards Structural Strength and Safety Evaluation Within Bridge Management Systems, George Hearn, Dan M. Frangopol and Milanendu Chakravorty, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p290-295.

Structure reinforcement

Application of FRP Reinforcement in Structural Precast Concrete, T. Russell Gentry and Lawrence C. Bank, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p575-582.

Concrete Columns Reinforced with Fiber Reinforced Plastic Rebars, Saeed Daniali and Noel S. Paramanantham, (Infrastructure: New Materials and Methods of Repair,

Kim D. Basham, ed., 1994), p567-574.

Effects of Design-Integrated Process Planning on Productivity in Rebar Placement, Md. Salim and Leonhard E. Bernold, CO Dec. 94, p720-738.

A 'Grab' Bag of Information on Rebar, CE Dec. 94, p8.

Analysis and Computation, Franklin Y. Cheng, ed., 1994, 0-87262-974-0, 398pp.

Architecture and Lightweight Structures: A Methodical Design Approach, Vinzenz Sedlak, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1010-1023.

Braced Double Skinned Structure in Lunar Application, Hamid R. Adib-Jahromi, Ramesh B. Malla and Michael A. Accorsi, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p47-56.

Building the Perfect Ski Slope?, CE Mar. 94, p10.

Control of Hysteretic System Using Velocity and Accelera-tion Feedbacks, J. N. Yang, Z. Li and S. C. Liu, EM Nov. 92, p2227-2245.

Damage Detection in Structures Based on Feature-Sensitive Neural Networks, Z. Peter Szewczyk and Prabhat Hajela, CP Apr. 94, p163-178.

Damping Systems for Controlling Wind Induced Motions of Structures, Ahsan Kareem and Yukio Tamura, (Structures Congress XII, N. C. Baker, ed. and Barry J. Lood-no, ed., 1994), p845-850.

Design Implications of Advanced Analysis in LRFD, J. Y. Richard Liew and W. F. Chen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1167-1172.

Developing an Object Based Planning System for Precast Concrete Building Structures, John I. Messner, Victor E. Sanvido and Masaaki Ikeda, (Computing in Civil Engi-neering, Khalii Khozeimeh, ed., 1994), p1426-1429.

Distributional Information for Ejection Fragments, Eric P. Steinberg, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p402-413.

Dynamic Analysis of a High Speed Transport Model by Using a Piecewise Continuous Timoshenko Beam Model, Ji Yao Shen and William M. McGinley, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p27-36.

Experimental Measurements of Dynamic Loads Imposed by Moving Crowds, A. Ebrahimpour, R. L. Sack, W. N. Patten and A. Hamam, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1385-1390.

Flow-Measurement Structures of Compound Cross Section for Rivers, Mustafa Gögüs and Dogan Altınbilek, IR

Jan./Feb. 94, p110-127

Formal Specification of AEC Product Models, Harpreet S. Chadha, John W. Baugh, Jr. and Jeannette M. Wing, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p571-578.

Glass-covered Lightweight Spatial Structures, Jörg Schlaich and Hans Schober, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1-27.

Implementation of a Viscoplastic, Kinematic Hardening Constitutive Model for Impact Prediction, Jeffrey R. Constitutive Model for Impact Frederick C. Taverner, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994).

Improving Dynamic Finite Element Models Using Test
Data, N. S. Khot and D. E. Veley, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p18-26.

Integrated Automation Systems in Structural Engineering, Song Fong Jan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1318-1325.

Long-Term Monitoring of Civil Structures using Smart Structures Techniques, T. Russell Gentry, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1392-1402.

Methodology for Optimum Sensor Locations for Parameter Identification in Dynamic Systems, Firdaus E. Udwadia,

EM Feb. 94, p368-390.

Overview - Electrical Substation Structures Design Guide, Leon Kempner, Jr., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p597-600.

Parallel Algorithms for Integrated Structural/Control Optimization, A. Saleh and H. Adeli, AS July 94, p297-314.

Reliability of Structures for the Moon, Haym Benaroya, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p166-175.

Seismic Renewal of Civil Infrastructure Systems, M. P. Singh and S. C. Liu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1508-1513.

Shear Effects on the Free Vibrations of Coupled Shear Walls, G. Q. Li and B. S. Choo, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1727-1734.

A Symbol-form Mapping Framework for Conceptual Design Support, S. R. Gorti and D. Sriram, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1591-1598.

Tensegrity Structures: Filling the Gap Between Art and Science, Michele Melaragno, (Spatial, Lattice and Ten-sion Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1024-1035.

Thermal Response in Antenna Under Laser Irradiation, Leslie A. Blackham and Arsalan Razani, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p196-205.

A Thousand Points of Data, William Ronald Woods and Daniel Steven Krasno, CE June 94, p54-56.

Where do the Arrows Come From? Evaluating Structural Loads, Duane S. Ellifritt, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1364-1368.

Experimental Study on the Strut Type of Cable Net Mem-brane Structures, Masao Saitoh, Akira Okada, Hiroaki Tabata and Toshio Mochizuki, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p573-582

Phoenix Central Library: Reading Room Roof, Michael W. Ishler, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba,

ed., 1994), p38-46.

Strut-Tie Model Design of Disturbed Regions in Concrete Structures, Y. M. Yun, A. Alshegeir and J. A. Ramirez, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p233-238.

- Adaptive Instructor Model for an Engineering ITS, Nelson C. Baker and Chaisak Srisethanil, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1059-
- Computer Buying Guide for Engineering Students, J. K. Nelson, S. D. Schiff and D. A. Latimer, CC Apr. 94,
- Concrete Canoes from 20 Schools to Race this Month in New Orleans in Contest Finals, NE June 94, p15
- Fast Track in the 'SLO' Lane Helps Cal Poly Civil Engi-neers Triumph as Best ASCE Student Group in the Nation, NE Oct. 94, p9-10.
- More than 20 Young Civil Engineers Share \$43,000 in ASCE Scholarships and Fellowships for 1994, NE Oct.

A New Approach to Water Education: Children's Water Festivals, Darell D. Zimbelman and Brian R. Werner, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

Raising Students' and Educators' Awareness of Radioac-tive Materials Transport Through Creative Classroom Materials and Exhibits, Judith Holm, Cheryl Sandoz, Jennifer Dickenson, Anne Marie Smith and Jan Cor-telyou Lee, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p213-216.

Scaling Up is Hard to Do: Experiences in Preparing a Case-Based Design Aid Prototype for Field Trial, Eric A. Domeshek, Craig M. Zimring and Janet L. Kolodner, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p430-437.

Strategy for Passing the Civil P.E. Exam, John G. Everett and James T. Mitroka, El July 93, p269-278.

Summer Engineering Outreach Program for Native Americans, Omnia El-Hakim, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p868-872

Teaching Engineering to Increase Motivation, N. C. Mick-leborough and D. G. Wareham, El Jan. 94, p29-35.

Teaching Soil Mechanics Laboratories with Computer Assistance, William Whitaker, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1280-1285.

Tunnel School, Brian Brenner and Richard O'Brien, El Oct. 94, p405-412.

"A New Way of Teaching Structural Engineering With the 'AN/EX' Mini-Laboratory", Richard A. Behr, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1571.

Studs

Behavior of Gypsum-Sheathed Cold-Formed Steel Wall Studs, Thomas H. Miller and Teoman Pekoz, ST May 94, p1644-1650.

Unstiffened Strip Approach for Perforated Wall Studs, Thomas H. Miller and Teoman Pekoz, ST Feb. 94, p410-421.

Subcritical flow

Automated Field Irrigation System Using Side Weirs, R. Singh and T. Satyanarayana, IR Jan./Feb. 94, p48-59.

Critical and Supercritical Flows in two Unstable, Mountain Rivers, Toutle River System, Washington, Andrew Simon and J. H. Hardison, III, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p741-745.

Discharge Coefficient of Rectangular Side Weirs, R. Singh, D. Manivannan and T. Satyanarayana, IR July/Aug. 94,

p814-819.

Effect of Orientation and Size of Helley-Smith Sampler on Its Efficiency, Jocelyn M. Gaudet, André G. Roy and James L. Best, HY June 94, p758-766.

Evaluation of Supercritical/Subcritical Flows in High-Gradient Channel, Douglas J. Trieste, HY Aug. 92, p1107-1118.

Flow patterns in a mountain stream, Lisa C. Hubbard and Colin R. Thorne, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p737-741.

Numerical Simulation of One Dimensional Transcritical Flow, Ehab A. Meselhe, Fotis Sotiropoulos and Forrest M. Holly, Jr., (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p512-516.

A Numerical Study of Hydraulic Jump and Mixing in a Stratified Channel With a Sill, Ping Chen, R. Grant Ingram and Jianping Gan, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p119-133

Supercritical Flows Versus Subcritical Flows in Natural Channels, Douglas J. Trieste, (Hydraulic Engineering 94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p732-736.

Subgrades

Compacted High-Gravel-Content Subgrade Materials, William N. Houston, Sandra L. Houston and Kenneth D. Walsh, TE Mar./Apr. 94, p193-205.

Field Evaluation of Plate Bearing Load Test on Pavement Soils in Florida, W. Virgil Ping and Ling Ge, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p231-238.

Influence of Geotextiles on Performance of Saline Sebkha Soils, Sahel N. Abduljauwad, Fouad Bayomy, Abdul-Karim M. Al-Shaikh and Omar S. Baghabra Al-Amoudi, GT Nov. 94, p1939-1960.

Lateral Cyclic Response of Pile in Viscoelastic Winkler Subgrade, Shintaro Yao and Toyoaki Nogami, EM Apr. 94, p758-775.

Mat Foundation Design: An Historical Perspective, Edward J. Ulrich, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p107-120.

P-y Analysis of Laterally Loaded Piles in Clay Using DMT, M. A. Gabr, T. Lunne and J. J. Powell, GT May

94, p816-837.

Pavement Renovation with HPI Electrochemical Method, Roland S. Jary, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p643-653

Proposed Uniform Scale for Stiffness of Unbound Pavement Materials for Pavement Design, Herbert F. Southgate and Kamyar C. Mahboub, TE Nov./Dec. 94, p940-952.

Resilient Modulus for Fine-Grained Subgrade Soils, Dingqing Li and Ernest T. Selig, GT June 94, p939-957.

Soil Stabilization Using Oil-Shale Solid Waste, John P. Turner, GT Apr. 94, p646-660.

Submarine pipelines
Dredged Material Dispersion from the Vicinity of a Pipeline Discharge, Tylers Beach, Virginia, Allen Teeter, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p918-

Submerged flow

Correction for Settlement in Submerged Parshall Flumes, S. Abt, A. Genovez and B. Florentin, IR May/June 94,

Model-Prototype Conformance of a Submerged Vortex in the Intake of a Vertical Turbine Pump, K. Warren Frizell, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p482-489.

Submerged jets
Local Scour Due to Submerged Horizontal Jet, S. S. Chatterjee, S. N. Ghosh and M. Chatterjee, HY Aug. 94, p973-992

Submerged vanes
Flow and Sediment Transport at River Diversions, Yalin
Wang, Brian Barkdoll and A. Jacob Odgaard, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph
R. Rumer, ed., 1994), p1060-1064.

Performance of Submerged Vanes for Control of Sediment in an Irrigation Canal, Steven W. Tanis, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1181-1185.

Submerging

Factors Affecting Nitrite Buildup in Submerged Filter Sys-tem, Oliver J. Hao and Jin M. Chen, EE Sept./Oct. 94,

Subsidence

Behavior of Foundations Subjected to Large Ground Movements, Richard M. Bennett, Eric C. Drumm and Guoming Lin, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p49-54. Collapse Mechanism of Compacted Clayey and Silty

Sands, T. A. Alwail, C. L. Ho and R. J. Fragaszy, (Verti-cal and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1435-1446.

Cover-Subsidence Sinkhole Evaluation of State Road 434, Longwood, Florida, Jon Foshee and Brian Bixler, GT Nov. 94, p2026-2040.

Groundwater Development and Related Issues, Abdul Hannan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p308-311.

Prediction of Land Subsidence due to Ground-Water Use in Snow Country, Kazumasa Mizumura, HY Apr. 94,

Soil-Structure Interaction During Mining Induced Ground Movements, Guoming Lin, Eric C. Drumm, Richard M. Bennett, Larry Powell and Ted Triplett, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1004). 3765-707.

ments, Albert 1. Yeung, ed. and Guy 1. Feno, ed., 1994), p786-797. Surface Subsidence Prediction by Nonlinear Finite-Element Analysis, Yacoub Najjar and Musharraf Zaman,

GT Nov. 93, p1790-1804.

Analysis of Embedded Foundations by Substructure-Deletion Method, R. Betti and A. M. Abdel-Ghaffar, EM June 94, p1283-1303.

Effect of Flexibility on Impedance Functions for Circular Foundation, Gin-Show Liou and Pao-Han Huang, EM

July 94, p1429-1446. Element Identification of Member Properties of Framed Structures, Andres W. C. Oreta and Tada-aki Tanabe, ST July 94, p1961-1976.

Object-Oriented Structural Analysis with Substructures, Richard Sause and Jun Song, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p153-160.

Subsurface drainage

Agroforestry Drainage Management Model. III: Field Salt Flow, F. F. Karajeh and K. K. Tanji, IR Mar./Apr. 94, p397-413.

Agroforestry Drainage Management Model: I: Theory and Validation, F. F. Karajeh, K. K. Tanji and I. P. King, IR Mar./Apr. 94, p363-381.

- Agroforestry Drainage Management Model: II: Field Water Flow, F. F. Karajeh and K. K. Tanji, IR Mar./Apr. 94, p382-396.
- Comparison of Models for Subsurface Drainage in Flat and Sloping Lands, E. Lorre, B. Lesaffre and R. W. Skaggs, IR Mar./Apr. 94, p266-277.
- Standard Guidelines for the Design of Urban Subsurface Drainage (ANSI/ASCE 12-92) Standard Guidelines for Installation of Urban Subsurface Drainage (ASCE 13-93) Standard Guidelines for Operation and Maintenance of Urban Subsurface Drainage (ASCE 14-93) (St No. 92-012, 93-013, 93-014), American Society of Civil Engineers, 1994, 0-87262-996-1, 60pp.

Subsurface flow

- A-Tough: A Multimedia Fluid-Flow/Energy-Transport Model for Fully-Coupled Atmospheric-Subsurface Interactions, Parviz Montazer, Dale Hammermeister and Joseph Ginanni, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p.2333-2340.
- Dissolution of TCE and TCA Pools in Saturated Subsurface Systems, Albert E. Pearce, Evangelos A. Voudrias and Michael P. Whelan, EE Sept./Oct. 94, p1191-1206.
- Subsurface Transport Modeling of the Savannah River and Yucca Mountain Sites, Bryan E. Dunlap, Darrell W. Pepper and Dale E. Stephenson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1848-1853.
- Ventilation Considerations for Repository Subsurface Advanced Conceptual Design, Hang Yang and Kalyan K. Bhattacharyya, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p530-537.

Subsurface investigations

- Applications of Multi-mode Imaging to Multiple Offset VSP Data, A. H. Balch, Cemal Erdemir and Joseph P. Rousseau, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2797-2803.
- A Case History of Settlement of an Embankment on Lagoonal Deposits Influenced by Artesian Conditions, An-Bin Huang and Bob Y. K. Wong, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p426-435.
- Collecting Sediment Environmental and Geotechnical Data Using an Impact Core Sampler, James M. Schmidt, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p279-287.
- Compaction Grouting Stops Settlement of an Operating Water Treatment Plant, Percy M. Wimberly, III, F. Barry Newman, Kenneth B. Andromalos and Chris R. Ryan, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1176-1192.
- Construction Monitoring Activities in the ESF Starter Tunnel, John Pott and Scott Carlisle, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1993-1998.
- Delineating Limits of Remediation for Heavy Metal Contaminated Sediments in River and Cove Areas, Gregory P. Matthews and Thomas M. Simmons, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1240-1249.
- Estimating Autocovariance of In-Situ Soil Properties, Don J. DeGroot and Gregory B. Baecher, GT Jan. 93, p147-166.
- Fast Foundation for Soft Clay, Joseph R. Hilton, Jr., Richard L. Novotny and Ronald E. Rager, CE Mar. 93, p62-65.
- Geotechnical Analysis of Capped Dredged Material Mounds, Armand J. Silva, Horst G. Brandes, Carl J. Uchytil, Thomas J. Fredette and Drew Carey, (*Dredging* '94, E. Clark McNair, Jr., ed., 1994), p410-419.
- Geotechnical Baseline Reports, Teresa Austin, CE Dec. 94, p56-57.

- Isotopic Studies of Yucca Mountain Soil Fluids and Carbonate Pedogenesis, Ted A. McConnaughey, Joseph F. Whelan, Kimberley P. Wickland and Richard J. Moscati, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p;2584-2589.
- Knowledge-Based Expert Systems For Geotechnical Factors in Dredging, S. Joseph Spigolon, Reda M. Bakeer and Jack Fowler, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p269-278.
- Settlement of a 15-Meter Deep Fill Below a Building, Percy M. Wimberly, III, Samuel G. Mazzella and F. Barry Newman, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p398-416.
- Spread Footing Settlement Prediction, Carsten H. Floess, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p164-167.
- Spread Footing Settlement Prediction for ASCE Specialty Conference "SETTLEMENT '94°, Jon R. Foshee, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p186-187.
- Tree Root Induced Settlement of a Large Industrial Building Founded on Expansive Clay-A Case History, Aziz Aboaziza and Hisham H. H. Mahmoud, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1472-1481.
- Use and Abuse of Settlement Analysis, Ralph B. Peck, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), pl-7.

Subsystems

Compliance with NRC Subsystem Requirements in the Repository Licensing Process, Homi Minwalla, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1578-1584.

Subways

- Deep Dig, Tight Squeeze, Joseph C. Clougherty, Richard F. O'Brien and Mark W. Pelletier, CE Aug. 94, p42-45.
- Marta North Line Midtown Station, Jerzy T. Jacak and Cheryl L. McAfee, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p176-181.

Suction

Underwater Cleanup of a Pool of Liquid Creosote, B. G. Bennett and I. K. Hill, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p961-970.

Callata

- Biological Removal of Heavy Metals by Sulfate Reduction Using a Submerged Packed Tower, George Neserke, Linda Figueroa and Nevis Cook, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p257-264.
- Long-Term Simulation of Decreased Acid Loading on Forested Watershed, Todd H. Rees and Jerald L. Schnoor, EE Mar./Apr. 94, p291-312.
- Magnesium-Sodium Sulfate Attack in Plain and Blended Cements, Rasheeduzzafar, Omar Saeed Baghabra Al-Amoudi, Sahel N.i Abduljauwad and Mohammad Maslehuddin, MT May 94, p201-222.
- Rebar Corrosion and Sulfate Resistance of Blast-Furnace Slag Cement, A. S. Al-Gahtani, Rasheeduzzafar and S. S. Al-Saadoun, MT May 94, p223-239.

Sulfidor

- Corrosion of HLW Carbon Steel Containers in the Vapor Phase of Salt Brines. E. Smailos, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p963-968.
- Sensitized Photooxidation of Dissolved Sulfides in Water, T. F. Brewer, J. G. Curtis, E. A. Marchand, V. D. Adams and E. J. Middlebrooks, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), 9233-240.

Tests for Biogenic Sulfuric Acid Corrosion in a Simulation Chamber Confirms the On Site Performance of Calcium Aluminate Based Concretes in Sewage Applications, Wolfgang Sand, Thierry Dumas, Serge Marcdargent, Albert Pugliese and Jean-Louis Cabiron, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p35-55.

Sulfur

Bioleaching of Metals from Sewage Sludge: Elemental Sulfur Recovery, B. R. Ravishankar, J. F. Blais, H. Ben-moussa and R. D. Tyagi, EE Mar./Apr. 94, p462-470. Control of Odor and VOC Emissions at Wastewater Treat-

ment Plants -Boston Harbor Case Study-, Robert Getter, Cheryl Breen and Mark Laquidara, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p548-555.

Feasibility of Dual Technology in Manufacturing Lunar Concrete, Mohsen A. Issa and Husam A. Omar, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p933-941.

Production of Lunar Concrete Using Molten Sulfur, Husam A. Omar and Mohsen Issa, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p952-959.

Critical Loads and Development of Acid Rain Control Options, Hugh Ellis and Michael L. Bowman, EE Mar./Apr. 94, p273-290.

From Smog to Feedstock, CE July 94, p8.

Hydration Mineralogy of Cementitious Coal Combustion By-Products, Gregory J. McCarthy and J. K. Solem-Tishmack, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p103-121.

Kinetics of SO2-Dolomite Reaction: Application of Random Pore Model, Sanjeev S. Tambe, Srinivas S. Yerrapragada and K. L. Gauri, MT Feb. 94, p65-77.

What Do SO₂ Emissions Cost? Allowance Prices and Externality Adders, Benjamin F. Hobbs, EY Dec. 94, p122-132.

Supercritical flow

Bed Load Roughness in Supercritical Flow, Scott E. Stonestreet, Ronald R. Copeland and Darla C. McVan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p747-751.

Characteristics of Supercritical Flow below Sluice Gate, Iwao Ohtsu and Youichi Yasuda, HY Mar. 94, p332-346.

Considerations in 2-D Modeling of Hydraulically Steep Flow, R. C. Berger and R. L. Stockstill, (Hydraulic En-gineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1285-1289.

Critical and Supercritical Flows in two Unstable, Mountain Rivers, Toutle River System, Washington, Andrew Simon and J. H. Hardison, III, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p741-745.

Evaluation of Supercritical/Subcritical Flows in High-Gradient Channel, Douglas J. Trieste, HY Aug. 92, p1107-1118.

Flow patterns in a mountain stream, Lisa C. Hubbard and Colin R. Thorne, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p737-741.

An Improved Design of Excluding Sediment into River Intake Structures, Wu-Sung Ke, Sue-Jen Wu and Che-Yuan Huang, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1193-1197

Incipient Hydraulic Jump at Channel Junctions, George C. Christodoulou, HY Mar. 93, p409-421.

Numerical Analysis of High Velocity Flow with Zero-Depth Line and Oblique Shock Wave in Steep Open-Channels, Takashi Hosoda and Nozomu Yoneyama, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1270-1274. Numerical Simulation of One Dimensional Transcritical Flow, Ehab A. Meselhe, Fotis Sotiropoulos and Forrest M. Holly, Jr., (Hydraulic Engineering '94, George V Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p512-

A Numerical Study of Hydraulic Jump and Mixing in a Stratified Channel With a Sill, Ping Chen, R. Grant Ingram and Jianping Gan, (Estuarine and Coastal Model-ing III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swan-son, ed., 1994), p119-133.

Safety Grates in Supercritical Channels, Julia E. Allred-Coonrod, IR Jan./Feb. 94, p218-224.

Strengths and Weaknesses of Shallow Water Equations in Steep Open Channel Flow, R. C. Berger, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1257-1262.

Supercritical Flow Behind Chute Piers, Roger Reinauer and Willi H. Hager, HY Nov. 94, p1292-1308. Supercritical Flow in Circular-Shaped Side Weir, Willi H.

Hager, IR Jan./Feb. 94, p1-12.

Supercritical Flows Versus Subcritical Flows in Natural Channels, Douglas J. Trieste, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p732-736.

Superstructures

Comparative Analysis of Bridge Superstructure Deteriora-tion, David Veshosky, Carl R. Beidleman, Gerald W. Buetow and Muge Demir, ST July 94, p2123-2136.

Comparison of Bridge Deterioration Rates, David Veshosky and Carl R. Beidleman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p296-301.

Pre-Engineered Short Span Steel Bridges, Camille G. Ru-beiz and Charles D. Gorman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1082-1087.

The Tatara Bridge - World's Longest Cable-Stayed Span, Manabu Ito and Takeo Endo, (Structures Congress XII. N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p677-682

Supervision

SCADA System Controls Combined Sewer Overflow Reg-ulation System to Optimize Wastewater Collection, Russell W. Batzel, (*Computing in Civil Engineering*, Khalil Khozeimeh, ed., 1994), p822-828.

Axisymmetric Plastic Plates with Ring Supports at Optimum Locations, C. M. Wang, S. K. Ting and W. A. M. Alwis, EM Feb. 94, p400-407.

Free-Vibration Analysis of Point-Supported Orthotropic Plates, D. J. Gorman, EM Jan. 94, p58-74.

Glass-covered Lightweight Spatial Structures, Jörg Schlaich and Hans Schober, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1-27.

Research and Application of Various Joints of Space Grid Structures in China, Xi-Liang Liu, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p221-228.

Tension Element to Reduce Loads in Rim Support of Inflatable Reflector, Gershon Grossman, AS Apr. 94, p129-142.

Vibration of Mindlin Plates on Point Supports Using Constraint Functions, K. M. Liew, Y. Xiang, S. Kitipornchai and M. K. Lim, EM Mar. 94, p499-513.

'Shock Absorbers' for Cars and Quakes, ET Oct./Nov. 94, p5.

Surcharge

Generalized Coulomb Active Earth Pressure for a Distanced Surcharge, Ernesto Motta, GT June 94, p1072-

Measured Downdrag on Seven Coated and Uncoated Piles in New Orleans, Randall K. Bush and Jean-Louis Briaud, (Vertical and Horizontal Deformations of Foun-dations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1011-1027. Modeling Settlements of an Existing Municipal Solid Waste Landfill Sideslope Using an Earthen Surcharge Pile, William L. Deutsch, Jr., Owen R. Esterly and John Vitale, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1135-1148.

Ultimate Settlement by Hyperbolic Plot for Clays with Ver-tical Drains, Siew-Ann Tan, GT May 93, p950-956.

Vacuum consolidation Technology-Principles and Field Experience, J. M. Cognon, I. Juran and S. Thevanay-agam, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1237-1248.

Vacuum-Assisted Consolidation of a Hydraulic Landfill, A. Jacob, S. Thevanayagam and E. Kavazanjian, Jr., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1249-1261.

Surf beat

On the Generation of Infragravity Waves by Shoaling Multidirectional Waves, Okey Nwogu, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p1-14.

Surf zone

2DV Circulation-Pattern: Wave Decay and Undertow Modelling with Nearcir Code, F. Collado, A. Sánchez-Arcilla, M. G. Coussirat and J. Prieto, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p556-570.

Breaking Wave Persistence in Parametric Surf Zone Models, Howard N. Southgate and Helen M. Wallace, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p543-

Crest-Breaking Time-Lapse Approach for Measuring Breaker Angle, P. Chandramohan, B. U. Nayak and N. M. Anand, WW May/June 94, p318-324.

Decay of Random Waves on Non-Monotonic Profiles, Magnus Larson, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p503-517.

Evaluation of Depth-Limited Wave Breaking Criteria, George M. Kaminsky and Nicholas C. Kraus, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p180-193.

Experimental Study of Undertow and Turbulence Intensity Under Irregular Waves in the Surf Zone, Nels J. Sultan and Francis C. K. Ting. (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p602-613.

High-Resolution Measurements of Sand Suspension by Plunging Breakers in a Large Wave Channel, William R. Dally and Stephen F. Barkaszi, Jr., (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p263-277.

Hydrodynamic Processes on the Lower Shoreface of the Dutch Coast, Piet Hoekstra and Klaas T. Houwman, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p852-866.

Image Analysis of Surf Zone Hydrodynamics, J. M. Redondo, A. Rodriguez, E. Bahia, A. Falqués, V. Gracia, A. Sánchez-Arcilla and M. J. F. Stive, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p350-365.

Irregular Wave Overtopping of Revetments in Surf Zones, Nobuhisa Kobayashi and Andrew W. Raichle, WW

Jan./Feb. 94, p56-73.

Laboratory Experiment of Longshore Bars Produced by Breaker-Induced Vortex Action, Da Ping Zhang, Tsuguo Sunamura, Shigenobu Tanaka and Koji Yamamoto, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p29-43.

Low-frequency Fluctuations of Suspended Sand and Wave Groups in the Surf Zone, R. D. Kos'yan, S. Yu. Kuznetsov and N. V. Pykhov, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p352-363. Mixing by Shear Instabilities of the Longshore Current, J. Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p376-390.

Nearshore Breaking Waves: A Numerical Model, Scott L. Douglass and Juan C. Ortiz, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael

Hemsley, ed., 1994), p864-879.

The Nourtec Experiment of Terschelling: Process-Oriented Monitoring of a Shoreface Nourishment (1993-1996), P. Hoekstra, K. T. Houwman, A. Kroon, P. van Vessem and B. G. Ruessink, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p402-416.

Numerical Model Verification Using SUPERTANK Data in Surf and Swash Zones, Daniel T. Cox, Nobuhisa Kobayashi and David L. Kriebel, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p248-262.

Sediment Suspension Events and Shear Instabilities in the Bottom Boundary Layer, D. L. Foster, R. A. Holman and R. A. Beach, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p712-726.

A Surfzone Parameter Sensitivity Analysis on LIP11D Suspended Sediment and Return Flow Measurements, G. Mocke, A. Reniers and G. Smith, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p571-585.

Theory and Observation of Currents and Setup Over a Shallow Reef, Graham Symonds, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicho-

las C. Kraus, ed., 1994), p1-13.

Verification of the Shearstress Boundary Conditions in the Undertow Problem, Marcel J. F. Stive and Huib J. De Vriend, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p533-542.

Wave Transformation Measurements at SUPERTANK, David L. Kriebel and Jane M. Smith, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p233-247.

Wave-Induced Longshore Currents in Surf Zone, Donghoon Yoo, WW Nov./Dec. 94, p557-575.

Surface defects

Heuristic Algorithms for Aggregating Rail-Surface-Defect Data, Roemer M. Alfelor and Sue McNeil, TE Mar./Apr. 94, p295-311.

Surface irrigation

Correct Form of Hall Technique for Border Irrigation Advance, A. Al-Azba and T. Strelkoff, IR Mar./Apr. 94, p292-307.

Furrow Advance-Rate Solution for Stochastic Infiltration Properties, D. Renault and W. W. Wallender, IR May/ June 94, p617-633.

Two-Dimensional Simulation of Basin Irrigation. I: Theory, E. Playan, W. R. Walker and G. P. Merkley, IR Sept./Oct. 94, p837-856.

Two-Dimensional Simulation of Basin Irrigation. II: Applications, E. Playán, W. R. Walker and G. P. Merkley, IR Sept./Oct. 94, p857-870.

A Lagrangian Model for Surface Buoyant Jets, Maneesha Joshi and J. F. Atkinson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p487-491.

Surface mining

Gully Erosion Minimization on Reclaimed Surface Mines Using SSAST Computer Model, Rose A. McKenney and Thomas W. Gardner, IR Sept./Oct. 94, p910-924.

An Approach to the Calculation Method of Mean Sediment Size, Yingyan Chen and Huilin Zhao, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p805-809.

Impervious Cover Extraction Using Remote Sensing/GIS, Stuart B. Murchison, John M. Hunt and Steven C. Veal, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

Optical Remote Sensing of Wave Surface Kinematics, Stephen Riedl, Richard Seymour and Jun Zhang, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p943-950.

Generalized Inner Region Velocity Distribution Equation, Prabhata K. Swamee, HY May 93, p651-656.

Impact Factors for Simple-Span Highway Girder Bridges, Dongil Chang and Heehyun Lee, ST Mar. 94, p704-715. Sediment Transport in Sewers and Design Implications,

Chandramouli Nalluri and Aminuddin Ab Ghani, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p933-938.

Vibration of Suspension Bridges Under Vehicular Move-ment, P. K. Chatterjee, T. K. Datta and C. S. Surana, ST Mar. 94, p681-703.

Surface runoff

Defining and Using Reference Evapotranspiration, George H. Hargreaves, IR Nov./Dec. 94, p1132-1139.

Determination of Watershed Features for Surface Runoff Models, N. K. Garg and D. J. Sen, HY Apr. 94, p427-

Heuristic Knowledge-base Approach to Runoff Estimation in Midwestern States Using a SCS Curve Number Method, Jaewan Yoon and G. Padmanabhan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p410-417

A Shape-Finding Finite Element Analysis for an Equally-Stressed Surface in Membrane Structures, T. J. Kwun, S. Suessed Surface in Memorane Studenties, 1.3. Kwin, 5. Y. Sur and H. W. Cho, (*Spatial, Lattice and Tension Structures*, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p724-731.

Surface vehicles

A Surface Exploration Vehicle Testbed for Real-Time Control Exerimentation, Songiae Lee, R. Michael Brown, Ta-Yu Yuan, Chih-Kang Chao, Dhaval Patel, Gordon K. Lee and Robert B. Kelley, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1333-

Surface waters

Application of a Geographic Information System to Evaluate Environmental Hazards, Mary J. S. Roth, Deborah L. Shaffer and Roger Ruggles, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p265-272

Artificial Recharge of Aquifers, Charles L. Joy, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p376-383.

Assessing Roughing Filtration Design Variables, Jennifer O. Cole, Catherine Westersund and M. Robin Collins, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p170-

Assessing the Reliability of Low Pressure Membrane Systems for Microbial Removal, Samer S. Adham and Joseph G. Jacangelo, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p313-319.

Beneficial Use Alternatives for Water Treatment Plant Residuals, Ann M. Copeland, Carel Vandermeyden and David A. Cornwell, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p137-145.

A Computerized Open Channel Flow Measurement Device, Stan E. Malinky, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p27-36.

Design Considerations for Use of Wedge Wire Screens at

Surface Water Intake Structures, Mahmood Naghash and Adnan M. Alsaffar, (Hydraulic Engineering '94, George Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p452-456.

- Evaluation of Enhanced Coagulation for DBP Control, Richard J. Miltner, Sheila A. Nolan, Marcus J. Dryfuse and R. Scott Summers, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p484-491.
- A Gap in the Surface Water Treatment Rule: The Watersheds, Daniel A. Okun, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p501-507.

General Stochastic Unit Hydrograph, Allen Hjelmfelt and Menghua Wang, IR Jan./Feb. 94, p138-148.

Maximum Surface Storage Provided by Crop Residue, John E. Gilley and Eugene R. Kottwitz, IR Mar./Apr. 94, p440-449.

A Multi-Dimensional Transport Model Utilizing a Charac-teristic-Galerkin Approach, John F. DeGeorge and Ian P. King, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p407-421

Ozonation as an Alternative to Mandatory Filtration, Dimitrios Katehis, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p384-391.

Predicting the Impact from Significant Storm Events on a Hazardous Waste Site, Udai P. Singh, Neal P. Dixon and J. Stephen Mitchell, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p772-780.

Short-Term Forecasts for Lake Erie, John G. W. Kelley, Chieh-Cheng J. Yen, Jay S. Hobgood, David J. Schwab and Keith W. Bedford, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p227-231.

Surface Water Quality Modeling in the Rio Grande, Nicole Seguin, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p778-781.

Transport Process of Surface Liquid Spills, Hsien-Ter Chou, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p145-149.

Treatment of Drinking Water Containing Bromate and Bromide Ions, Taha F. Marhaba and Steven J. Medlar, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p476-

Water Quality Enhancement Technology for River-Reservoir Systems, John S. Gulliver and Steven C. Wilhelms, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1331-1340.

Why Design Storm Methods Have Become Unethical, William James, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1203-1207.

Surface waves

Automated Surface Wave Method: Inversion Technique, Deren Yuan and Soheil Nazarian, GT July 93, p1112-

Breaking Wave Measurement by a Void Fraction Technique, Ming-Yang Su and John Cartmill, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p951-962.

Effects of Multiple Modes on Rayleigh Wave Dispersion Characteristics, Kohji Tokimatsu, Shuji Tamura and Hisaya Kojima, GT Oct. 92, p1529-1543.

Experimental Verification of Numerical Model for Nonlinear Wave Evolutions, Takumi Ohyama, Serdar Beji, Kazuo Nadaoka and Jurjen A. Battjes, WW Nov./Dec. 94,

Field Studies of Variability of Underwater Coastal Relief and Bed Sediment Composition During Storm, Ruben D. Kos'yan and Nicolay V. Pykhov, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p89-102.

Surface-active agents

Biodegradation of Phenanthrene in Sand Columns in the Presence of Nonionic Surfactants, David Norris and Tariq Ahmed, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p360-367.

Experimental Data and Modeling for Surfactant Micelles, HOCs, and Soil, David A. Edwards, Zhongbao Liu and Richard G. Luthy, EE Jan./Feb. 94, p23-41.

Surfactant Solubilization of Organic Compounds in Soil/ Aqueous Systems, David A. Edwards, Zhongbao Liu and Richard G. Luthy, EE Jan./Feb. 94, p5-22.

Surge

Hydraulic Transients in Two Acid Transfer Lines, Muin M. Baasiri, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p129-151.

and Douglas H. Wegener, ed., 1994), p.129-131.
Joint Probability of Superelevated Water Levels and Wave
Heights at Duck, North Carolina, Douglas A. Gaffney
and Gregory L. Williams, (Ocean Wave Measurement
and Analysis, Orville T. Magoon, ed. and J. Michael
Hemsley, ed., 1994), p905-917.
Nollipace, Exhibits of Differential Surga, Chambers, Vice.

Nonlinear Stability of Differential Surge Chambers, Xiao-Liang Yang and Chen-Shan Kung, HY Nov. 92, p1526-

3-D Coordinates - A Universal Rectangular Coordinate System for a GIS and Other Spatial Databases, Earl F. Burkholder, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p233-240.

GIS Matches As-Built Drawings with Reality, CE Jan. 94,

p13-14.

Glossary of Mapping Science, ISBN: 1-57083-011-8, Joint Committee of the American Society of Civil Engineers, American Congress on Surveying and Mapping, and American Society for Photogrammetry and Remote Sensing, 1994, 0-7844-0050-4, 581pp.

GPS Goes Real Time, Carl W. Sumpter and Gregory W. Asher, CE Sept. 94, p64-66.

Quality in Constructed Project: Surveying Engineering, Gunther Greulich, Wayne H. Valentine and R. R. Chamard, SU May 94, p52-61.

Quality of Map Data in Geographic Information Systems,

Gary A. Jeffress, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p221-224.

Range Determination Using Target Images, Fouad A. Ahmed, SU Nov. 94, p135-144.

Real-Time Surveying System Heading for the Real World,

Real-Time Surveying System Heating for the Real World, ET Aug./Sept. 94, p1,4.
Recent Advances in Precision Surveying Technology and Integrated Deformation Analysis, Adam Chrzanowski, W. Trevor Greening and Anna Szostak-Chrzanowski, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p721-731.

Survey Distance Units: A Better Way, Larry E. Stanfel, SU Aug. 94, p130-132.

Clients May be Coming Back, CE Jan. 94, p8.

Consulting-Firm Values Slip during 1993, NE Apr. 94, p5. Empowered Teams Dominate U.S. Business, ME Mar./Apr. 94, p2.

Rating the Megaprojects, CE Jan. 94, p8.

The Role of SEAOH in the Post-Iniki Rebuilding and Recovery Effort, Howard K. C. Lau and Michael K. H. Yee, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p278-283.

Statistically-Based Evaluation of Homes Damaged by Hurricanes Andrew and Iniki, Jay H. Crandell, Mark T. Gibson, Edward M. Laatsch, Mark S. Nowak and J. Albert vanOvereem, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p519-528.

Subjective De-Biasing of Data Sets: A Bayesian Approach, M. Elisabeth Paté-Cornell, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p175-185.

Survey and Alignment of Particle Accelerators and Transport Lines, Robert E. Ruland, SU Feb. 94, p11-24.

Survey Explores Family and Career Differences Between the Sexes, ME Jan./Feb. 94, p12.

Using GIS Technology to Assess Hurricane Damage, C. S. Papacostas, Wayne M. Hamaguchi, Harold S. Hamada and John Jaquess, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p607-616.

Water Reclamation Potential in Southern California to the Year 2010, Bahman Sheikh, (Water Policy and Manage-ment: Solving the Problems, Darrell G. Fontane, ed. and

Harry N. Tuvel, ed., 1994), p661-664.

Wind Resistance of Conventional Light-Frame Buildings, Ronald W. Wolfe, Ramon M. Riba and Mike Triche, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p652-662.

Surveys, data collection

Advertising Public Outreach: Going Where the People Are, Douglas Bradford and Daniel Burns, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p76-82.

Annual Liability Survey Shows Premiums Rising, CE Jan.

94, p25. Assessment: How to Make Lemons into Lemonade, John H. Page, El Jan. 94, p25-28.

Bonding Easier in '94, Study Predicts, CE Mar. 94, p8. Building Construction Detailed Estimating Practices in Saudi Arabia, Kamal M. Al-Harbi, David W. Johnston

and Habib Fayadh, CO Dec. 94, p774-784. Building Procurement by Design and Build Approach, Is-saka Ndekugri and Adrian Turner, CO June 94, p243-

Cleaning Wastewater Isn't Cheap, CE July 94, p8.

Community Partnering in Accelerated Construction Program, Leslie R. Henley, UP June 94, p74-86.

Data Capture with GPS for Sewer Map Updates, John S. Gresh and Rodolfo B. Fernandez, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1615-1622

Data on Salary and Benefits for Civil Engineers Can be Found in Results of ASCE's Latest Survey, NE Feb. 94,

Differentiating the Experience of Boater "Publics", Ellen B. Drogin, Andrew Holdnak, Alan R. Graefe and James M. Falk, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p132-139.

Employers Speak Out on Telecommuting, ME May/June 94, p2-3.

Humanware, Human Error, and Hiyari-Hat: A Template of Unsafe Symptoms, Shigeomi Nishigaki, Jeannette Vav-rin, Noriaki Kano, Toshiro Haga, John C. Kunz and Kincho Law, CO June 94, p421-442 Long-Term Maintenance Plan for Vietnam Memorial, CE

Oct. 94, p10,12.

Market Models, Protest Bids, and Outliers in Contingent Valuation, Greg Lindsey, WR Jan./Feb. 94, p121-129.

National Survey of Materials Engineering Program, K. P. George, John R. Rohde and Srinivasa L. Iyer, El July 94, p313-323.

No Surprise: ASCE Members are Highly Computer-Literate, CE Sept. 94, p79.

Proposed Rehabilitation of Storrow Drive Interchange Tunnel, Frank J. Heger, Atis A. Liepins and Paul L. Kelley, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1111-1118.

Public Opinion Polling and the Yucca Mountain Controversy: A Seven Year Inventory (12/86–89/3), Jeffery J. Himmelberger and Mike L. Baughman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p142-149.

Report Analyzes Pay and Perks, CE Sept. 94, p8 The State (By State) of Water Quality, CE Mar. 94, p8.

State DOTs Tackle Problem Projects, CE Mar. 94, p18-19. Summary of Highway Product Evaluation Practices and HITEC Needs Survey, CERF Report No. 94-5012, Civil Engineering Research Foundation, Highway Innovative Technology Evaluation Center, 1994, 0-87262-860-4,

Survey Explores Ins and Outs of Innovation, CE July 94,

Survey of Stormwater Detention State of Practice, Ben R. Urbonas, Jay Carlson and L. Scott Tucker, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p873-876.

Survey on Local Public Works Yields Some Surprises, CE

July 94, p21-22.

Survey Results for Concrete Construction Live Loads on Newly Poured Slabs, Haitham Ayoub and Saeed Karshe-

nas, ST May 94, p1543-1562

The Use of Recyclable Waste Materials in Hot Mix Asphalt Concrete Highway Pavements, Stanley K. Ciesielski, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p327-335.

Water-Quality Data Management: Survey of Current Trends, Laurel Saito, Neil S. Grigg and Robert C. Ward, WR Sept./Oct. 94, p587-612.

We'd do it Again, Say Partnering Vets, ME July/Aug. 94,

p11.

"A Comparison of Characteristics and Economic Expenditures of Boat Show Patrons At Two Types of Boat Shows", Mary H. Bielen, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p248-256.

Suspended load

Sediment Transport Analysis Rio Grande Floodway at San Marcial Gauge, Mohammed A. Samad, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1115-1119.

Velocity Measurements in Asymmetric Turbulent Channel Flows, R. N. Parthasarathy and M. Muste, HY Sept. 94,

p1000-1020.

Suspended sediments

Agitation Dredging Environmental Study, Larry M. Stuber and Elizabeth A. Day, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p76-85.

Data Analysis of Bed Concentration of Suspended Sediment, Julio A. Zyserman and Jørgen Fredsøe, HY Sept.

94, p1021-1042

Demonstration of Equipment for Dredging Contaminated Sediments at Buffalo River, Buffalo, New York, B. Thomas Kenna, Daniel E. Averett, Paul A. Zappi and Stephen M. Yaksich. (Dredging '94, E. Clark McNair, Jr., ed., 1994), p885-895. Development of a Technique to Acoustically Detect and

Study Fluid Mud and its use in Dredging Management, Shawn Hanrahan and Anthony DePasquale, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p440-448.

Diaphragm Height of Ejector of Uniform Sediment, Nan-dana Vittal and G. A. Shivcharan Rao, HY Mar. 94, p398-405.

Distribution of Suspended Sediment over Wave-Generated Ripples, Erik Asp Hansen, Jørgen Fredsøe and Rolf Deigaard, WW Jan./Feb. 94, p37-55.

Dredged Material Dispersion from the Vicinity of a Pipeline Discharge, Tylers Beach, Virginia, Allen Teeter, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p918-

The Dredging Research Program Technical Area 2 Material Properties Related to Navigation and Dredging, Don Banks, (Dredging '94, E. Clark McNair, Jr., ed., 1994),

p1554-1561.

High-Resolution Measurements of Sand Suspension by Plunging Breakers in a Large Wave Channel, William R. Dally and Stephen F. Barkaszi, Jr., (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p263-277.

Issues Related to Modeling the Transport of Suspended Sediments in Northern San Francisco Bay, California, Ellen Thomas McDonald and Ralph T. Cheng, (Estua-rine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p551-564.

Laboratory Experiment of Longshore Bars Produced by Breaker-Induced Vortex Action, Da Ping Zhang, Tsuguo Sunamura, Shigenobu Tanaka and Koji Yamamoto, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p29-43. Low-frequency Fluctuations of Suspended Sand and Wave Groups in the Surf Zone, R. D. Kos'yan, S. Yu. Kuznetsov and N. V. Pykhov, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p352-363.

Principal Components Time Spectra of Suspended Sedi-ment in Random Waves, Onyx W. H. Wai, Keith W. Bedford and Sean T. O'Neil, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C.

Kraus, ed., 1994), p296-305.

Puckette, Paul, Michael Tubman and Blair Brumley, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p86-95 Sediment Measurement Instrumentation A Personal Perspective, E. V. Richardson, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p94-103.

Sediment Suspension Events and Shear Instabilities in the Bottom Boundary Layer, D. L. Foster, R. A. Holman and R. A. Beach, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed.,

1994), p712-726.

Sediment Transport Analysis Rio Grande Floodway at San Marcial Gauge, Mohammed A. Samad, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1115-1119.

Sediment Transport by Wind Waves, Long Waves and Mean Currents: An Experiment on Nearshore Morpho-dynamics, Lake Huron, Canada, Troels Aagaard and Brian Greenwood, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p14-28

Space-Time Variability of Sediment Suspension in the Nearshore Zone, A. E. Hay and A. J. Bowen, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed.

and Nicholas C. Kraus, ed., 1994), p962-975.

Study for Deepening of the Martin Garcia Channels at Rio de la Plata, Uruguay, D. W. Yang and J. Bonasia, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1091-1100.

A Surfzone Parameter Sensitivity Analysis on LIP11D Suspended Sediment and Return Flow Measurements, G. Mocke, A. Reniers and G. Smith, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p571-585.

Temporal and Spatial Variations of Suspended Sediment Concentration during Navigation Traffic in a Natural River, Renjie Xia, Ta Wei Soong and Nani G. Bhowmik, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1131-1135.

Tide- and Stormdriven Sediment Transport on the Inner-Shelf Along the Dutch Coast, Jan W. H. van de Meene and Leo C. van Rijn, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p822-836.

Turbidity and Contaminant Release During Dredging of Contaminated Sediments, Ronald W. van Oostrum and Peter Vroege, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p210-219.

Turbulent Structure of Water and Clay Suspensions with Bed Load, Zhaoyin Wang and Peter Larsen, HY May 94, p577-600.

A Watershed Model for Estimating Suspended Sediment Hydrographs, Hafez Q. Shaheen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1176-1180.

Suspended solids

Chelating Composite Membrane: Its Application in Selective Heavy-Metal Solid-Phase Separation, Sukalyan Sengupta and Arup K. Sengupta, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p265-272.

Design and Execution of Hydrodynamic Field Data Collection using Acoustic Doppler Current Profiling Equipment, Timothy L. Fagerburg and Thad C. Pratt, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p530-538.

Non-Point Source Pollution Reduction, J. Thomas Franques and Rhonda L. Townsend, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1252-1256.

Urban Runoff Based on Land Use and Particle Size, Linda D. Pechacek, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1242-

Suspended structures

Enter the Dragon, Scott Danielson, CE Nov. 94, p64-67.

Experimental Study on the Strut Type of Cable Net Mem brane Structures, Masao Saitoh, Akira Okada, Hiroaki Tabata and Toshio Mochizuki, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p573-582.

Intermediate Support Cable Logging Systems, James W. Charland, Alan G. Hernried and Marvin R. Pyles, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994),

p791-800.

Vibration Characteristics of Suspension Membrane Struc-tures, Norio Masaoka, Kazuo Ishii and Ryo Muranaka, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed.,

1994), p732-741.

Wall Relief and Three Dimensional Suspension Sculpture Utilizing Tension and Membrane Structures, Warren Seelig, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p602-611.

Field Test of Stormwater Best Management Practices, S. L. Yu, S. L. Barnes, R. J. Kaighn, Jr. and S. L. Liao, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p508-515.

Sweden

Increasing the Credibility of Scientific Analyses, Thomas A. Cotton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p296-300.

Isotope Systematics in Ground Water and Hydrogenic Deposits at ASPO, Sweden, Bill Wallin and Zell E. Peterman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2692-2701.

Tunnel Boring Machine for Nuclear Waste Repository Research Project, Hans A. Janzon, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p403-410.

Swelling

Compacted High-Gravel-Content Subgrade Materials, William N. Houston, Sandra L. Houston and Kenneth D. Walsh, TE Mar./Apr. 94, p193-205.

Deformation of Fill Slopes Caused by Wetting, Iraj Noorany, Joel A. Sweet and Ian M. Smith, (Stability and Performance of Slopes and Embankments II, Raymond B. Seed, ed. and Ross W. Boulanger, ed., 1992), p1244-1257.

Performance of Slab-on-Grade Foundations on Expansive Soil, Robert W. Day, CF May 94, p129-138.

Review of Wetting-Induced Collapse in Compacted Soil, Evert C. Lawton, Richard J. Fragaszy and Mark D. Hetherington, GT Sept. 92, p1376-1394.

Settlement of Compacted Fills Caused by Wetting, Iraj Noorany and Jeffrey V. Stanley, (Vertical and Horizon-tal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1516-1530.

Swell versus Saturation for Compacted Clay, Robert W. Day, GT Aug. 92, p1272-1278.

Swell-Shrink Behavior of Compacted Clay, Robert W. Day, GT Mar. 94, p618-623.

Swelling of Black Cotton Soil Using Centrifuge Modeling, A. D. Gadre and V. S. Chandrasekaran, GT May 94, p914-919.

Swelling pressure

Swelling Behavior of Shales in Cold Regions, Z. W. Wang, S. L. Huang and R. C. Speck, CR Mar. 94, p21-34.

Switzerland

Interfaces and interactions in the Swiss Waste Disposal Programme, C. McCombie, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p238-248. Results from the Kristallin-I Performance Assessment, Paul

A. Smith, Piet Zuidema, Ian G. McKinley, Enzo Curti, Ryk A. Klos, Trevor Sumerling and Dan Galson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1648-

1654

Site Characterisation and Performance Assessment in the Swiss Nuclear Waste Disposal Programme: Benefits from the Second NAGRA/USDOE Project Agreement, S. Vomvoris, P. Zuidema and P. Blümling, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2616-2623.

Swiss Guideline: Protection Objectives for the Disposal of Radioactive Waste, Auguste Zurkinden, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1429-1434.

Switzerland: Rail Access to Airports and the Fly-Luggage System, Eugene H. Jud, (Aviation Crossroads: Chal-lenges in a Changing World, William J. Sproule, ed., 1994), p159-161.

Synthetic fibers

Modeling of Fiber Pullout in Cement Based Composites Using an R-Curve Approach, B. Mobasher and C. Y. Li, (Infrastructure: New Materials and Methods of Repair,

Kim D. Basham, ed., 1994), p559-566.

Tensile Fracture of Carbon Whisker Reinforced Cement Based Composites, B. Mobasher and C. Y. Li, (Infrastructure: New Materials and Methods of Repair, Kim

D. Basham, ed., 1994), p551-558.

Use of Synthetic Fibers for Reinforcement of Thin Sheet Cement Products, Nazmi Sharabi, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p545-550.

Synthetic materials

The Use of Crumb Rubber Modifier in Hot-Mix Asphalt, Mark S. Buncher and E. R. Brown, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p53-63.

System analysis

Element-Level System Identification with Unknown Input, Duan Wang and Achintya Haldar, EM Jan. 94, p159-

Parameter Estimation of Structures from Static Response. II: Numerical Simulation Studies, M. R. Banan, M. R. Banan and K. D. Hjelmstad, ST Nov. 94, p3259-3283.

Parameter Estimation of Structures from Static Response. I: Computational Aspects, M. R. Banan, M. R. Banan and K. D. Hjelmstad, ST Nov. 94, p3243-3258.

STRANDNET: A Top-Level Storage, TRANsportation & Disposal NETwork Systems Analysis Tool for Spent Nu-clear Fuel Waste Management, Johnny Brock, Felix Godwin and Ray Mitchell, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1704-1711.

System Analysis of Non-fuel Assemble Hardware and Spent Fuel Disassembly Hardware: Its Generation and Recommended Disposal, Douglas A. Williamson and James S. Tulenko, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Com-

mittee, 1994), p1553-1561.

Systems Modeling for the DOE Spent Nuclear Fuel Program, Dennis Evans, Corey Beebe, Michael Caldwell, Brett Carlsen, Gina Ban, David Van Haaften and Scott Gladson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p331-337.

Theoretical and Experimental Evaluation of FRP Components and Systems, Sotiris N. Sotiropoulos, Hota V. S. GangaRao and Ahmed N. K. Mongi, ST Feb. 94, p464-

The Total System Approach to Efficient Pipeline Design, Randal W. Stuart, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p159System reliability

Hyperspace Division Method for Structural Reliability, Sa toshi Katsuki and Dan M. Frangopol, EM Nov. 94, p2405-2427.

Redundancy-Constrained Minimum-Cost Design of Water-Distribution Nets, Heekyung Park and Jon C.

Reliability-Based Design of Prestressed Concrete Beams, Ali S. Al-Harthy and Dan M. Frangopol, ST Nov. 94, p3156-3177

Shoals System Capabilities for Hydrographic Surveying, J. L. Irish, W. J. Lillycrop, L. E. Parson and M. W. Brooks, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p314-

Systems

Story-Drift, Shear, and OTM Estimation from Building Seismic Records, S. T. Mau and V. Aruna, ST Nov. 94, p3366-3385.

Water-Treatment-System Design for Turbidity Removal. I: Simulation, H. B. Dharmappa, S. Vigneswaran, J. Verink and O. Fujiwara, EE July/Aug. 94, p900-920.

Systems engineering

Incorporating Stakeholder Values in Systems Engineering Decision Making, Philip M. Altomare, Michael L. Grygiel and Bernard G. Morais, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p1762-1769.

Kumar, Prasanna N. Jeffrey R. Williams, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1365-1371.

Multi-Attribute Rehabilitation of Storm or Combined Sewer Systems, Santiago M. Reyna, Jacques W. Delleur and Jorge A. Vanegas, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994),

Optimal Design of Structural Concrete Bridge Systems, M. Z. Cohn and Z. Lounis, ST Sept. 94, p2653-2674. Second-Order Upper Bounds on Probability of Intersection

of Failure Events, Qiang Xiao and Sankaran Mahadevan, EM Mar. 94, p670-674.

Systems Engineering Applied to the Development of the Yucca Mountain Project Design Requirements Documents, M. Sam Rindskopf and Dennis C. Royer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1634-1640.

Systems management

Computer Use QA Documentation for Compliance with ISO-9000, Vyomesh Vora, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1812-1815.

Tailings

Depositional Turbidity Currents Laden with Poorly Sorted Sediment, Marcelo H. Garcia, HY Nov. 94, p1240-1263.

Evaluation of Consolidation Behavior of Mine Tailings, K. J. L. Stone, M. F. Randolph, S. Toh and A. A. Sales, GT Mar. 94, p473-490.

Tailwater

Behavior of Hydraulic Jump Basins, Boualem Hadjerioua, Emmett M. Laursen and Margaret S. Petersen, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p416-420.

Countercurrent Jet Device, Willi H. Hager, HY Apr. 94, p504-517

Impact Hydraulic Jump, Willi H. Hager, HY May 94, p633-637.

Riprap Criteria below Pipe Outlet, Mahmood Shafai-Bajestan and Maurice L. Albertson, HY Feb. 93, p181-

Tailwater Fishery Management Using a Fish Bioenergetics Model, Ming Shiao, Gary Hauser, Gary Chapman, Bruce Yeager, Tom McDonough and Jim Ruane, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p45-48.

Enter the Dragon, Scott Danielson, CE Nov. 94, p64-67.

New Program for the Marine Observation and Prediction Center of the Central Weather Bureau, Beng-chun Lee, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p124-134

Public Participation in Enviornmental Issues in Taiwan, K. K. Li, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p193-200.

The Spent Fuel Disposal Program in Taiwan, K. K. Li, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2297-2304.

Taiwan Promotes Waste Incineration, CE Sept. 94, p14.

Alternative Decisions for Space-Based Scheduling in Multi-Story Projects, Walid Y. Thabet and Yvan J. Beliveau, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1164-1171.

Analysis of Free Vibrations of Tall Buildings, Qiusheng Li, Hong Cao and Guiqing Li, EM Sept. 94, p1861-1876.

Application of Concrete-Filled Steel Tubular Columns in Tall Buildings in Earthquake Area, Chahg-Ji Gong, Xi Lin and Shao-Huai Cai, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p146-151.

Applications of Viscoelastic Dampers to High-Rise Buildings, C. S. Tsai and H. H. Lee, ST Apr. 93, p1222-1233.

Composite Walls as Shear Elements in Tall Structures, Howard Wright, Anwar Hossain and Stewart Gallocher, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p140-145.

CPM/LOB: New Methodology to Integrate CPM and Line of Balance, Saad A. Suhail and Richard H. Neale, CO

Sept. 94, p667-684.

Empirical Performance Comparison for Symbolic and Subsymbolic Learning Systems, Tomasz Arciszewski, Adam Borkowski, Tomasz Dybala, Janusz Racz and Piotr Wojan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1075-1082.

First Bank Place: A Composite Cruciform Spine, P. V. Banavalkar, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p134-139.

High-Strength Concrete Columns in High-Rise Buildings, Murat Saatcioglu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p37-42.

Lateral Bracing Criteria of the Composite Braces, Kazuo Inoue, Yasuo Higashibata and Kazuhiro Inoue, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p152-157.

Lateral Load Resisting Systems for Circular Buildings, Robert J. McNamara and Brent R. Goldstein, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p636-641.

Malaysia's Twins: High-Rise, High Strength, Rita Robison, CE July 94, p63-65.

Messeturm Tower: Frankfurt, Germany, Irwin G. Cantor and Ahmad Rahimian, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1550-1555.

Methods to Control Wind-Induced Building Motions, Ahsan Kareem, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p654-659

One Ninety One Peachtree and NationsBank: Composite Additions to the Atlanta Skyline, P. V. Banavalkar and J. P. Colaco, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p170-175.

One Peachtree Center: Atlanta Georgia, Housh Rahimza-deh and M. Nasim Akhtar, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p164-169.

Practical Application of Tuned Liquid Damper for Tall Buildings, Toshihiro Wakahara, Kenji Shimada and Yukio Tamura, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p851-856.

A Probabilistic Approach to the Response of Tall Buildings to Wind Loadings, Morteza A. M. Torkamani and Ramadan S. Murad, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1439-1444.

Representation of Vertical Constraints Knowledge for Scheduling Multi-Story Projects, Walid Y. Thabet and Yvan Beliveau, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p349-355.

Semianalytical Method for Parametric Study of Tuned Mass Dampers, Y. L. Xu and K. C. S. Kwok, ST Mar.

94, p747-764.

Simple Method for Approximate Analysis of Framed Tube Structures, A. K. H. Kwan, ST Apr. 94, p1221-1239.

A Simplified Method of Multistory-frame Analysis Including the P-Δ Effect, Hani Melhem and Khalid Niazi, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1302-1309.

The Slender Tower of 52-54 East End Avenue, Ahmad Rahimian, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1562-1567.

Structural Assessment of Bomb Damage for World Trade Center, Ennala Ramabhushanam and Marjorie Lynch, CF Nov. 94, p229-242.

Trapped in an Elevator during the World Trade Center Bombing: A Personal Account, Satinder P. S. Puri, CF

Nov. 94, p217-228.

Wind Action on Highrise Structures: Codes - Wind Tunnel - Reality, Nicholas Isyumov, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p430-445.

Wind Tunnel Testing of High-Rise Residential Buildings in Hurricane Areas, Peter A. Irwin, Mark A. Hunter, Mark Mosbat and Sanjeev M. Shah, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p663-673.

Tall structures

Behavior of Tall Frame Combining Rigid and Semi-Rigid Connections, Norimitsu Kishi, Wai-Fah Chen, Yoshiaki Goto and Ken-ichi G. Matsuoka, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1185-1190.

Composite Walls as Shear Elements in Tall Structures, Howard Wright, Anwar Hossain and Stewart Gallocher, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p140-145.

How Tall Transmission Poles Survived Hurricane Andrew, Kou-Roung Chang, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p377-386.

Stability of Lift Slab Structure During Construction Stage, Rusk Masih, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p271-277.

Construction Operations on the OUTPOST Platform in Orbit, Thomas C. Taylor, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p423-432.

Free-Vibration Analysis of Tank Containing Two Liquids, Yu Tang, EM Mar. 94, p618-636.

Hills, Charles R. Vojislav Banjac and A. Sharif Heger, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p671-678.

LDV System for Towing Tank Applications, R. N. Parthasarathy and F. Stern, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p386-395.

Plastic Collapse at Lap Joints in Pressurized Cylinders under Axial Load, Jin-Guang Teng, ST Jan. 94, p23-45.

Resource Recovery Facilities for Earth Approaching Com-ets, Thomas C. Taylor, Anthony C. Zuppero and Lucy-Ann McFadden, (Éngineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p562-571.

Settlement of Tanks on Clay, J. Michael Duncan, Timothy B. D'Orazio and Phil Myers, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p92-106.

System for Orbital Recovery of Space Shuttle's External Tank, Raul Ferri, AS Jan. 94, p92-103.

A Tank Moisture Model (TAMMO) for Describing Neutroan Scan Data, Edward R. Siciliano, Hans Toffer and W. Todd Watson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1102-1103.

Taper

Continuous Dynamic Model for Tapered Beam-Like Struc-tures, Ji Yao Shen, Elias G. Abu-Saba, William M. McGinley, Lonnie Sharpe, Jr. and Lawrence W. Taylor, Jr., AS Oct. 94, p435-445.

Equations for Tapered Thin-Walled Beams of Generic Open Section, Sundaramoorthy Rajasekaran, EM Aug.

Instability of Tapered Thin-Walled Beams of Generic Sec-Sundaramoorthy Rajasekaran, EM Aug. 94, p1630-1640.

Parameters Affecting Distortional Buckling of Tapered Steel Members, Hamid Reza Ronagh and Mark Andrew Bradford, ST Nov. 94, p3137-3155

Shear-Stress Distribution in Symmetrically Tapered Cantilever Beam, Edwin P. Russo and Gregory Garic, ST Nov. 92, p3243-3249.

Congestion Pricing Just Another Ploy for Redistribution of Wealth (ltr), CE June 94, p36,38.

Approximate Form of Green-Ampt Infiltration Equation, Jeffry J. Stone, Richard H. Hawkins and Edward D. Shirley, IR Jan./Feb. 94, p128-137.

Teaching methods

Adaptive Instructor Model for an Engineering ITS, Nelson C. Baker and Chaisak Srisethanil, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1059-

Application of OOP and GUI to the Development of Edu-cational Software in Structural Mechanics, S. T. Mau and V. Aruna, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1273-1279.

The BS8110 CAL Program for Teaching RC Design, B. S. Choo, (Computing in Civil Engineering, Khozeimeh, ed., 1994), p1663-1670.

Case Study of Development of Distance-Learning Course, D. A. Langford, T. Bilham, R. Fellows and R. Newcombe, EI Oct. 94, p333-340.

Constructivist Learning Model for Ethics Education, Richard H. McCuen, El July 94, p273-278.

Context for Writing in Engineering Curriculum, Matthew R. Kuhn and Karen Vaught-Alexander, El Oct. 94, p392-400. Effective Teaching Using SemiNotes, M. U. Hosain, El Apr. 94, p193-197.

Empirical Performance Comparison for Symbolic and Subsymbolic Learning Systems, Tomasz Arciszewski, Adam Borkowski, Tomasz Dybala, Janusz Racz and Piotr Wojan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1075-1082.

Future Concerns in Environmental Engineering Graduate Education, Richard G. Luthy, David A. Bella, James R. Hunt, James H. Johnson, Desmond F. Lawler, Charles R. O'Melia and Frederick G. Pohland, El Oct. 92, p361-

Integrating Ethics into Technical Curricula, Roger A. Killingsworth, Jr. and Darla J. Twale, El Jan. 94, p58-69.

Microworlds for Learning Through Inquiry, David McArthur, Matthew W. Lewis and Miriam Bishay, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1067-1074.

Multimedia in Civil Engineering, Jorge A. Vanegas and Nelson C. Baker, CE May 94, p71-73.

Multimedia Technology and Structural Steel Design, Ab-bas Aminmansour, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p315-320.

A New Laboratory for Teaching Structural Engineering, Richard A. Behr and David S. Vollenweider, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p321-326.

On the Shoulders of Giants, Francis E. Griggs, Jr., El July 94, p254-264.

Problems Faced by Faculty in Minority Institutions, Emmanuel U. Nzewi, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p89-92.

Simulating Learning Development for Construction, James D. Lutz, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1655-1662.

SteelDEM: An Interactive Multimedia Intelligent Tutor and Teaching Aid for Structural Steel Design, Abbas

and reacting and for Stuctural steep Design, About Assaminansour, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1458-1464.

Khozeimeh, ed., 1994), p1458-1464.

Sistance, William Whitaker, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1280-1285.

Teochine, with Multimedia, Example, and Jensee, Bollin, M.

Teaching with Multimedia: Example and Issues, Rollin H. Hotchkiss, El July 94, p279-289.

Collaboration in the Engineering Classroom, Patricia G. Frantz, Gregory C. Frantz and John T. DeWolf, El July 93, p297-303.

Design/Build Prequalification System, Kevin J. Potter and Victor Sanvido, ME Mar./Apr. 94, p48-56.

Group Dynamics and Construction Project Manager, Pan-

taleo D. Rwelamila, CO Mar. 94, p3-10. Partnering for Success, Thomas R. Warne, 1994, 0-87262-976-7, 90pp.

Partnering in Small Packages, Gary D. Bates, ME Nov./ Dec. 94, p22-23.
Partnering Pardign, Herbert F. Harback, Donald L. Basham

Partnering Parugin, Herbert F. Harback, Donald L. Basham and Robert E. Buhts, ME Jan/Feb. 94, p23-27.
 Partnering: A Team Building Approach to Quality Construction Management, Osama Abudayyeh, ME Nov./

Dec. 94, p26-29.

Process of Planning During Construction, Dora Cohenca-Zall, Alexander Laufer, Aviad Shapira and Gregory A. Howell, CO Sept. 94, p561-578.

Team-Building Process: Key to Better Project Results, Robert Albanese, ME Nov./Dec. 94, p36-44.

Value of Concurrent Engineering for A/E/C Industry, Jesus M. de la Garza, Primo Alcantara, Jr., Munish Kapoor and P. S. Ramesh, ME May/June 94, p46-55.

Advancement of Material Handling Technologies for In-Place Asphalt Pavement Recycling, Sotiris A. Pagdadis and Ilan Ishai, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p365-373.

Analysis and Computation, Franklin Y. Cheng, ed., 1994, 0-87262-974-0, 398pp.

Analysis and Evaluation of Alternative Technologies. Simaan M. AbouRizk, Srinivasa R. Mandalapu and Miroslaw Skibniewski, ME May/June 94, p65-71.

Applying Dredged Material to Recreation Area Develop-ment, Russell K. Tillman and Thomas R. Patin, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p271-282.

ASCE Board, in Atlanta, Gives Go-Ahead for Exploring Possibility of Electronic Textbook; Takes Further Steps for Headquarters Relocation, NE Dec. 94, p1,10.
ASCE to Launch High-Tech Newsletter, CE Mar. 94, p8.

Caltrans Toll Bridges to Go Electronic, CE June 94, p19-

Constructed Civil Infrastructure Systems R&D: A Europe-an Perspective, CERF report #94-5010, Civil Engineering Research Foundation, 1994, 0-7844-0001-6, 145pp.

Corps' CPAR Program Enters Sixth Year, CE Mar. 94, p8. Design and Technological Opportunities at Waterparks: The Hyland Hills' Water World Experience, Terry R. Barnhart, (Marinas, Parks and Recreation Develop-ments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p83-92.

Emerging Technology Newsletter Debuts, CE June 94, p8. Engineering Sustainable Development, John Prendergast, CE Oct. 93, p39-42.

Federal Cleanups: Good News from Bad, Teresa Austin,

CE Mar. 94, p48-51. Flexible Extracation of Practical Knowledge from Bridge Databases, Yoram Reich, Steven J. Fenves and Eswaran Subrahmanian, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1014-1021. Infrastructure: a More Comprehensive Policy is Needed, Neil S. Grigg, El Apr. 94, p183-192.

Instrumentation Needs and Possibilities: A Dialogue Between Suppliers and Users, Robert Ettema and Vito Lat-kovitch, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p539-540.

Integrating Pen Computers with Other Keyless Data Systems for Construction Applications, Richard J. Coble and Charles J. Kibert, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1639-1646.

Introducing New Process Technologies into Construction Companies, Maria Laborde and Victor Sanvido, CO

Sept. 94, p488-508.

Is Your Automated Information System Obsolete? Chester A. Shuman, ME Mar./Apr. 94, p24-26.

It's Official: HITEC Opens for Business, NE Mar. 94, p3. Japan Builds 21st Century Monuments, Charles R. Heidengren, CE Aug. 94, p57-59.

Keeping Up With Computers, Charles S. Hodge, CE June 94, p70-72.

Looking into Toxics, CE June 94, p19.

Management Strategy of Cement Industry in Technology Toward the Next Century, Hiroshi Uchikawa, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p524-561.

Managerial Aspects of Information-Technology Strategies for A/E/C Firms, James Breuer and Martin Fischer, ME

July/Aug. 94, p52-59.

Microwave Process Strips Structures of Lead Paint Safely and Cheaply, ET Apr./May 94, p1,3.

New and Innovative Repair Technologies (Soil Stabilization and Pot-Hole Repair/Prevention), William A. Mallow, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1097-1102.

Oxygen Generation from Synthetic Moon Soil Using a Plasma Reactor, P. R. Taylor, S. A. Pirzada, K. A. Prisbrey, H. Gold and R. E. Hicks, (Engineering, Construc-tion, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1178-1187.

Recent Advances in Precision Surveying Technology and Integrated Deformation Analysis, Adam Chrzanewski, W. Trevor Greening and Anna Szostak-Chrzanowski, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p721-731.

Research and Development — Why bother? Robert J. Tichy, (Structures Congress XII, N. C. Baker, ed. and

Barry J. Loodno, ed., 1994), p683-688.

Space Exploration: Getting a Handle on "Why?", Gordon R. Woodcock, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p960-968.

Strategies for Technology Push: Lessons from Construc-tion Innovations, C. H. Nam and C. B. Tatum, CO Sept.

92, p507-524.

Summary of Highway Product Evaluation Practices and HITEC Needs Survey, CERF Report No. 94-5012, Civil Engineering Research Foundation, Highway Innovative Technology Evaluation Center, 1994, 0-87262-860-4, 40pp.

Technological Advance in Japanese Building Design and Construction, Anthony C. Webster, 1994, 0-87262-932-5, 107pp.

The Three Ages of Engineering Calculations (ltr), CE Sept.

94, p30. Torching Soils Increases Strength and Stiffness, CE Apr. 94, p25.

Toward Integrated Design of Waste Management Technologies, Sam A. Carnes and Amy K. Wolfe, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p267-274.

Trenchless Sewer System Reconstruction Techniques, Lynn E. Osborn, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilita-tion Programs and Techniques, ASCE, 1994), p159-172. Vacuum consolidation Technology-Principles and Field Experience, J. M. Cognon, I. Juran and S. Thevanayagam, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1237-1248.

Wastewater Treatment Optimization Model for Developing World II: Model Testing, S. L. Tang and K. V. Ellis, EE

May/June 94, p610-624.

Wheel Space Station for 2025, Jason Hand and David Hargis, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p846-852.

Technology assessment

Adaptive Space Station Technologies and Systems for a Lunar Surface Return Mission, Larry Toups and Sam Ximenes, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p483-493.

Applying Multimedia Technology to Project Control, L. Y. Liu, A. L. Stumpf and S. S. Kim, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p608-613.

Asphalt Rubber a Federal Perspective, Joseph Massucco, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p467-474.

Construction Technologies for Sewer Rehabilitation, Santiago M. Reyna, Jorge A. Vanegas and Abdul H. Khan, CO Sept. 94, p467-487.

Developments in Dredges during the last decade, Ruud Ouwerkerk and Hans Greve, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p690-700.

Emerging Technologies for Short-Span Bridge Solutions, M. Zoghi, D. A. Tomley and M. P. Henderson, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1163-1170.

Human Factors in Civil and Geotechnical Engineering Failures, George F. Sowers, GT Feb. 93, p238-256.

Increasing the Credibility of Scientific Analyses, Thomas A. Cotton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p296-300.

Integrated Research for Civil Infrastructure Systems: A Fu-ture Challenge, S. C. Liu, K. P. Chong and M. P. Singh, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p1-13.

Keeping Up With Computers, Charles S. Hodge, CE June 94, p70-72

Managerial Aspects of Information-Technology Strategies for A/E/C Firms, James Breuer and Martin Fischer, ME July/Aug. 94, p52-59.

Multimedia Technologies for Civil and Construction Engituttificula reciniogies for Civil and Construction Engineering Professional Practice, Jorge A. Vanegas and Gary Smith, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p592-599.

One Mans View of Dredging Equipment 2020, Gerald E. Greener, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994),

p683-689.

Potable Water Reclamation-A Practical Option to Traditional Sources, Gary Bostrom, Peter D. Binney and Glenn Hamilton, (Water Policy and Management: Solv-ing the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p702-705.

A Sea Turtle Deflecting Hopper Dredge Draghead, Michael P. Alexander and Glynn E. Banks, (*Dredging '94*, E.

Clark McNair, Jr., ed., 1994), p857-864.

The Stump - A New Dimension in Dredging, George W. Batchelder, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p701-707.

An Update on Dredge Instrumentation and Automation, Arie Korevaar, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p764-775.

Water Injection Dredging in the United States, David Knox, Daniel J. Krumholz and James E. Clausner, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p847-856

Technology transfer

Demonstration Project for Scour Instrumentation, J. D. Schall, W. R. Ivarson and T. Krylowski, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p37-42.

Dredging '94, 2 Vols., E. Clark McNair, Jr., ed., 1994, 0-

7844-0010-5, 1580pp.
Global Environmental Change: Geoengineering Technology, Lyle M. Jenkins, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p524-531.

High-Tech Excavation on President's List, CE Feb. 94, p8. International Information and Technology Charles G. Gunnerson, El Oct. 91, p336-350

Microsurfacing Urban Pavements, David K. Hein, John J. Emery and Romualdo D'Ippolito, CE May 94, p55-57. Robots for Earth-and Points Beyond, CE Aug. 94, p8.

Steep Constructed Stream Channels and Chutes, Kenneth R. Wright, F. Robert McGregor and Gary Lacy, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p657-661.
Technology Development and Transfer in Environmental

Management, Jonathan Katz, Alan Karnovitz and Martin Yarbrough, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Commit-

tee, 1994), p314-7-314-12.

Technology Information Transfer in Public Outreach: A New Approach, John H. Peck and Mindy L. Wadkins, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p92-97

Transferring Construction Technology to the Moon and Back, John F. Connolly and Debra D. Shoots, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1086-1096.

Verification of the AECL Total System Performance Modernication of the AELL Total System Performance Models, Keith Kersch and Steve Oliver, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2437-2441.

Tectonics

Structural Character of the Northern Segment of the Paintbrush Canyon Fault, Yucca Mountain, Nevada, Robert P. Dickerson and Richard W. Spengler, (High Level Ra-dioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2367-2372.

Tedesko, Anton

Anton Tedesko, Designer of Major Engineering Structures in Concrete and Steel, Dies at 90, NE May 94, p5.

Telecommunication

Alternative Designs for a Water Resources Planning and Management Electronic Information Exchange Network, Quentin W. Martin, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p690-693.

Bubba, A Teleoperated Countermine Vehicle, Dave Hay-ward, Bryan Pletta, Jerry Clifford and Kerry Habiger, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p464-473.

Case Study of Development of Distance-Learning Course,
D. A. Langford, T. Bilham, R. Fellows and R.
Newcombe, El Oct. 94, p333-340.

Developing a National Spatial Data Infrastructure, John McLaughlin and Sue Nichols, SU May 94, p62-76. Developing Specifications for Cellular-Telephone Base

Stations, John C. Woolery, CO Sept. 94, p593-602. Effects of Hurricanes Andrew and Iniki on Lifelines, Masoud M. Zadeh, Tom Larsen, Charles Scawthorn, Craig Van Anne and Tom K. Chan, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994),

p223-232 Employers Speak Out on Telecommuting, ME May/June 94, p2-3.

To Boldly Go ... On Line, CC May 94, p8-9.

Automatic, Remote, Multiplexed Geotechnical Measurements with Time Domain Reflectometry (TDR), Charles H. Dowding and Fei-chiu Huang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1220-1227

Early Detection of Rock Movement with Time Domain Reflectometry, Charles H. Dowding and Fei-Chiu Huang, GT Aug. 94, p1413-1427. Strain Measurement on the Runner of a Hydroelectric Turbine, K. Warren Frizell, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p416-424.

Effects of Dust and Thermal Cycling on Telescope Mirror Performance, Koon Meng Chua, R. Eric Pease and Stewart W. Johnson, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p916-932.

An Inflatable Antenna for Space-Based Low-Frequency Radio Astronomy, John P. Basart, Shreekanth A. Man-dayam and Jack O. Burns, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1390-1399.

Low Frequency Radio Astronomy from Earth or Lunar Orbit, Jack O. Burns, John P. Basart and Bernard M. McCune, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1400-1409.

The Lunar Ultraviolet Telescope Experiment (LUTE), John D. Hilchey and Max E. Nein, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1431-1441.

Next Generation Space Telescope. I: Design Considera-tions, B. Scott May and Nicholas P. Jones, AS Oct. 94, p355-374.

Next Generation Space Telescope. II: Proposed Pointing Control System, B. Scott May and Nicholas P. Jones, AS Oct. 94, p375-397.

Optical Scatter From a Space Craft Mirror Due to Microscopic Impacts, Lawrence B. Crowell, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p368-377.

An Ultra-Lightweight Advanced Technology Telescope for Space Applications, P. C. Chen, R. J. Oliversen, H. Hojaji, W. K. Chu and T. L. Wilson, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1422-1430.

Temperature

Adaptive Space Station Technologies and Systems for a Lunar Surface Return Mission, Larry Toups and Sam Ximenes, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p483-493.

Assessment of Risk of Thermal Cracking in Hardening Concrete, Mats Emborg and Stig Bernander, ST Oct. 94,

Behavior of AC-20P Versus AC-30 Asphalt Concrete Mixtures, Peter Sebaaly, Imran Farooq and Jon Epps, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1059-1079.

Control of Random Crack Formation in Portland Cement Concrete Pavements, Yeou-Shang Jenq and Sang-Chel Kim, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p972-977.

Degradation of Acetate, Propionate, and Butyrate under Shock Temperature, Mustafa Öztürk, EE Mar./Apr. 93, p321-331.

Estimating Past Precipitation and Temperature from Fossil Ostracodes, Alison Jean Smith and Richard M. Forester, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2545-2552.

Global Environmental Change: Geoengineering Technology, Lyle M. Jenkins, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p524-531.

Improving the Pipeline Hydrostatic Leak Test Model, Rod-ney F. Wedge, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p182-205.

Irrigation Timing for Wheat Based on Climate, Crop, and Soil Data, R. P. Tripathi, IR May/June 92, p370-381.

Optimization of Concrete Drying Temperature for Monomer Impregnation, I. L. Al-Qadi, R. E. Weyers and T. Dutta, MT Feb. 94, p54-64.

Sensitivity of Great Lakes Forecasting System Nowcasts to Meteorological Fields and Model Parameters, William P. O'Connor and David J. Schwab, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p149-157.

Stream Water-Temperature Sensitivity to Weather and Bed Parameters, Bashar A. Sinokrot and Heinz G. Stefan, HY

June 94, p722-736.

Temperature distribution

Warping Stresses in Concrete Pavements on Pasternak Foundation, X. P. Shi, T. F. Fwa and S. A. Tan, TE Nov./Dec. 93, p905-913.

Admixtures May Add Months to Construction Schedules, ET Dec. 94/Jan. 95, p1,4.

Asphalt Pavement Temperature Related to Arid Saudi Environment, H. I. Al-Abdul Wahhab and F. A. Balghunaim, MT Feb. 94, p1-14.

Coastal Eutrophication and Temperature Variation, Jacques Ganoulis, Stilianos Rafailidis, Istvan Bogardi, Lucien Duckstein and Istvan Matyasovszky, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p317-330.

Comparison of Uranium Dissolution Rates From Spent Fuel and Uranium Dioxide, S. A. Steward and W. J. Gray, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p2602-2608.

Compressibility of Clays: Fundamental and Practical Aspects, Serge Leroueil, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p57-76.

Delayed Ettringite Formation, H. F. W. Taylor, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p122-131.

Effect of Temperature Changes on Water-Main Breaks, Ahmad Habibian, TE Mar./Apr. 94, p312-321.

Effects of Temperature and pH on Residual Aluminum in Alkaline-Treated Waters, John E. Van Benschoten, James N. Jensen and Md. A. Rahman, EE May/June 94, p543-559.

Field Test of Thermal Precompression, Tuncer B. Edil and Patrick J. Fox, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1274-1286.

Hydraulic Analysis of an HDPE Water Supply Pipeline, Yifan Zheng and Adnan M. Alsaffar, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H.

Wegener, ed., 1994), p318-328.

Hygrothermal Effects in Composite Sandwich Panels, Charles E. S. Ueng and Jonathan D. Sherrill, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p306-315.

Impact and Flexure Properties of Glass/Vinyl Ester Composites in Cold Regions, Vistasp M. Karbhari and Greg-

ory Pope, CR Mar. 94, p1-20.

Implication of Waste Package Heat Output Distributions Resulting From Waste Stream Variability, John F. King, Carol J. Rhodes and Steven F. Saterlie, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p868-876.

Investigation of Stress in a Circular Tunnel Due to Overburden and Thermal Loading of Horizontally Placed 21 PWR Multi Purpose Canisters, Nadia Kandalaft-Ladkany and Richard V. Wyman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p860-867.

Mixed-Layer Hydrothermal Reservoir Model, Poshu Huang, Joseph L. DiLorenzo and Tavit O. Najarian, HY July 94, p846-862.

Modeling Temperature Impacts on Salmon Survival, Jamie D. Anderson and Gerald T. Orlob, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p323-326.

The Performance and Behaviour of Biological Filter Walls as Affected by Cyclical Temperature Changes, George L. England, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p57-76.

Qualification Leak Testing of the GA-4 and GA-9 Closure Seal Design, Richard H. Boonstra, (High Level Radioac-

tive Waste Management, High Level Radioactive Waste

Program Committee, 1994), p923-930. Seasonal Variation of Resilient Modulus of Subgrade Soils, Myung S. Jin, K. Wayne Lee and William D. Kovacs, TE July/Aug. 94, p603-616.

Shakedown Analysis of Hollow Spheres, Wei Jiang, EM July 94, p1447-1480. Swelling Behavior of Shales in Cold Regions, Z. W. Wang, S. L. Huang and R. C. Speck, CR Mar. 94, p21-34.
Temperature Effect of Viscoelastic Dampers during Earth-

quakes, C. S. Tsai, ST Feb. 94, p394-409.

Temperature Effects on Rigid Pavements, I. E. Harik, P. Jianping, H. Southgate and D. Allen, TE Jan./Feb. 94,

Thermal Effects on Massive Concrete Pours, Toorak Zokaie and Timothy A. Osterkamp, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p27-34.

Thermoelastic Theory of Cylindrical Sandwich Shells with Piezoelectric Sensors or Actuators, Victor Birman, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p80-88

Viscoplastic Response of Structures for Intense Local Heating, Earl A. Thornton and J. D. Kolenski, AS Jan. 94, p50-71.

Temperature measurement Borehole Fluid Dynamic Temperature Logging to Evaluate Fracture Hydraulic Properties, C.-F. Tsang, F. V. Hale, P. Bluemling and S. Vomvoris, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2655-2659.

Temporary structures

Protecção Provisória do Molhe Oeste do Porto de Sines, Fausto Gonçalves Henriques and Ismael Byscaia de Carvalho, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p35-53.

Temporary Protection of the West Breakwater of the Port of Sines, Fausto Goncalves Henriques and Ismael Byscaia de Carvalho, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p54-69.

Algorithm for Hysteresis Analysis of Prestressed-Concrete Frames, Xiaozu Su and Bolong Zhu, ST June 94,

Anchorage of Non-Metallic Prestressing Tendons, Richard J. Schmidt, Charles W. Dolan and Lars E. Holte, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1415-1420.

Bonded Tendon Debate, Morris Schupack, CE Aug. 93,

p64-66.

Detailing Effects in Anchors for FRP Prestressing Tendons, Todd Stueve, Charles W. Dolan and David E. Walrath, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p386-391.

Nonlinear Analysis of Prestressed Concrete Structures, Mohd-Hisham Mohd-Yassin and Filip C. Filippou, (Structures Congress XII, N. C. Baker, ed. and Barry J.

Loodno, ed., 1994), p1421-1426.

Prestress Influence on Shear-Lag Effect in Continuous Box-Girder Bridge, Shih Toh Chang, ST Nov. 92, p3113-3121.

Static Response of Fiberglass Pretensioned Columns, Mohsen Issa, Rajan Sen, Daniel Mariscal and Mohsen Shahawy, ST Dec. 94, p3634-3648.

Tennessee

Geotech Surprises Should Be Expected, CE Dec. 94, p24. Hydraulic Model Readies River for 1996 Olympics, CE Mar. 94, p26.

A Physically-Based Model of Channel Widening, Stephen E. Darby and Colin R. Thorne, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p944-948.

'A' for Alabama, 'B' for Barge and 'E' for Engineering

Hall of Fame, NE May 94, p14.

Tensile loading

Geosynthetic Loads in Landfills Slopes: Displacement Compatibility, J. H. Long, R. B. Gilbert and J. J. Daly, GT Nov. 94, p2009-2025.

Material Model for Concrete in Cracked and Uncracked States, R. Meyer, H. Ahrens and H. Duddeck, EM Sept.

94, p1877-1895.

Tension Element to Reduce Loads in Rim Support of Inflatable Reflector, Gershon Grossman, AS Apr. 94, p129-142

Tensile members

Reliability of Structures for the Moon, Haym Benaroya, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p166-175.

Tensile Structures Highlight New Denver Airport, Horst Berger and Edward M. DePaola, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p957-968.

Field Measurements of Tensile Forces on a Spherical Dome Sector Caused by Internal Load of a Granular Product in Storage, Jack L. Brunk, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p172-179.

Long-Term Deflection of RC Beams, W. A. M. Alwis, A. Olorunniwo and K. K. Ang, ST July 94, p2220-2226.

Settlement Analysis of Landfill Liners over Deep Mined Areas, M. Gabr, J. J. Bowders and D. T. Mooney, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p436-450.

Tensile strength

Cracking and Fracture Behavior of Soil, Hsai-Yang Fang, (Fracture Mechanics Applied to Geotechnical Engineer ing, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p102-117.

Feasibility of Dual Technology in Manufacturing Lunar Concrete, Mohsen A. Issa and Husam A. Omar, (Engi-neering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p933-941.

Flexural/Tensile-Strength Ratio in Engineered Cementitious Composites, Mohamed Maalej and Victor C. Li,

MT Nov. 94, p513-528.

Fracture Toughness of Compacted Cohesive Soils Using Ring Test, Jack A. Harison, Bobby O. Hardin and Kamyar Mahboub, GT May 94, p872-891.

Influence of Concrete Tensile Ductility on Compressive Strength of Confined Columns, L. Bortolotti, MT Nov. 94, p542-563

Laboratory Performance of Quartzite Based Stone Matrix Asphalt Mixtures (SMAM), Ali A. Selim, Ramzi Taha and Fouad Bayomy, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p635-

Safety Analysis of Suspension-Bridge Cables: Williams-burg Bridge, John Matteo, George Deodatis and David

P. Billington, ST Nov. 94, p3197-3211.
Tensile Fracture of Carbon Whisker Reinforced Cement Based Composites, B. Mobasher and C. Y. Li, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p551-558.

Welded Wire Fabric for Bridges. I: Ultimate Strength and Ductility, Bilal M. Ayyub, Peter C. Chang and Naji A. Al-Mutairi, ST June 94, p1866-1881.

Tensile stress

Long-Term Deflection of RC Beams, W. A. M. Alwis, A. Olorunniwo and K. K. Ang, ST July 94, p2220-2226.

Numerical Modeling of Tensile Crack Propagation in Concrete Dams, Ram Kumar and G. C. Nayak, ST Apr. 94, p1053-1074.

Tensile Fracture of Carbon Whisker Reinforced Cement Based Composites, B. Mobasher and C. Y. Li, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p551-558.

Behavior of Foundations Subjected to Large Ground Movements, Richard M. Bennett, Eric C. Drumm and Guoming Lin, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p49-54.

Cable Systems with Elastic Supporting Elements, James W. Charland, Alan G. Hernried and Marvin R. Pyles, ST

Dec. 94, p3649-3665.

Characterizing Fracture Behavior of Fiber-Reinforced Composites, Surendra P. Shah, Yixin Shao and Zongjin Li, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p186-199

Crack Depths in Drying Clays Using Fracture Mechanics, Peter H. Morris, James Graham and David J. Williams, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p40-53.

Current State of Development and Future Trends in Employment of Air-Supported Roofs in Long-Span Appli-All Campbell and Paul Active and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p612-621.

The Effects of Bolt Over-Tightening on Bolted Connections, Edwin R. Schmeckpeper, Richard J. Nielsen and Guy Gentry, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p713-718.

Postcracking Formulation for Analysis of RC Structures Based on Secant Stiffness, Ananth Ramaswamy, F. Bar-zegar and G. Z. Voyiadjis, EM Dec. 94, p2621-2640.

Wall Relief and Three Dimensional Suspension Sculpture Utilizing Tension and Membrane Structures, Warren Seelig, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p602-611.

Tension leg platforms

Impact of Non-Gaussian pdf on Reliability Estimates for Deep Water Platforms, John M. Niedzwecki, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1463-1465.

Volterra Models of Ocean Structures: Extreme and Fatigue Reliability, S. R. Winterstein, T. C. Ude and T. Marthin-sen, EM June 94, p1369-1385.

Tension structures

Effects of Spatial Triangulation on the Behavior of "Tensegrity" Domes, David M. Campbell, David Chen, Paul A. Gossen and Kris P. Hamilton, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p652-663.

Form Finding Numerical Methods for Tensegrity Systems, René Motro, Sihem Belkacem and Nicolas Vassart, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed.,

1994), p704-713.

Phoenix Central Library: Reading Room Roof, Michael W. Ishler, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba,

ed., 1994), p38-46.

A Practical Design and Construction of Tension Rod Sup-ported Glazing, Toru Takeuchi, Haruyuki Kitamura, Kimiaki Harada, Kohei Higuchi, Akiho Harada and Mamoru Iwata, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Pengliba ed. 1904) 68(4-693. Penalba, ed., 1994), p684-693.

Reliability of Structures for the Moon, Haym Benaroya, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p166-175.

Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994, 0-87262-953-8, 1115pp.

Terminal facilities

676

Commercial Vehicle Operations and Automatic Vehicle Identification Applications at Airports, M. Allen Hoffman and Emily Van Wagner, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p162-173.

Terminology

Dredging Desk Reference: Accomplishments and Future Developments, Thomas M. Verna and Lyle J. Ma-ciejewski. (Dredging '94, E. Clark McNair, Jr., ed., 1994), p170-179.

Engineering Jargon and Civil Liability, Robert W. Day, EI

Oct. 94, p413-418.

Glossary of Mapping Science, ISBN: 1-57083-011-8, Joint Committee of the American Society of Civil Engineers, Committee of the Afficient Society of Civil Engineers, American Congress on Surveying and Mapping, and American Society for Photogrammetry and Remote Sensing, 1994, 0-7844-0050-4, 581pp.

Glossary of Marine Fiber Rope Terms, Task Committee on Marine Fiber Rope of the Waterways, Port Coastal and Ocean Division of ASCE, (Bill Remley, chmn.), 1993,

0-87262-896-5, 80pp.

Enabler Chassis Features and Mobiltiy Analysis, James S. Hollinger, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994). p210-219.

Terrain models

Algorithm for Precise Drainage-Basin Delineation, E. James Nelson, Norman L. Jones and A. Woodruff Miller, HY Mar. 94, p298-312.

Simulation of Autonomous Robotic Excavation, Regis Hoffman and Reid Simmons, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p115-122.

Test equipment

Automated Sensor Tester, Dave Hayward, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p158-165.

Test procedures

Recent Developments in Physical Testing of Aggregates to Ensure Durable Concrete, C. A. Rogers and S. A. Senior, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p338-361.

Testing

3-D Dynamic Analysis of the Brent-Spence Through-Truss Bridge, I. E. Harik, D. L. Allen, R. L. Street, M. Guo, R. C. Graves, J. Harison and M. J. Gawry, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1112-1117.

Aquifer Storage and Recovery in the Floridan Aquifer Sys-tem of South Florida, Albert Muniz and William B. Ziegler, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel,

ed., 1994), p69-72.

Behavior of Graphite/Epoxy Concrete Composite Beam M. Saiidi, F. Gordaninejad and N. Wehbe, ST Oct. 94, p2958-2976.

Bouncy Turf Tested in Soccer Field, CE Nov. 94, p86.

Characteristics of Mechanical Connectors for Construction of FRP Structures, Ed (Ahmed) Morsi and J. Larralde, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p991-1000.

Characterizing Fracture Behavior of Fiber-Reinforced Composites, Surendra P. Shah, Yixin Shao and Zongjin Li, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p186-199.

Compressive Strength of Masonry Prisms, Magdi A. Khali fa and Ahmed E. Magzoub, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1100-

Construction Monitoring Activities in the ESF Starter Tunnel, John Pott and Scott Carlisle, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1993-1998.

- Crack Detection in Beams Sensitivity Studies, Lidvin Kjerengtroen and Christopher Jenkins, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p483-490.
- Critical Concepts for Column Testing, Charles D. Shackelford, GT Oct. 94, p1804-1828.
- DBP and Hardness Control by Membrane Filtration, Charles D. Turner and Srinivasa R. Kadubandi, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p344-351.
- Design and Testing of the NDBC Wave Processing Module, Joel N. Chaffin, William Bell, Kathleen O'Neil and Chung-Chu Teng, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p277-286.
- Destructive Testing of Decommissioned Concrete Slab Bridge, R. A. Miller, A. E. Aktan and B. M. Shahrooz, ST July 94, p2176-2198.
- Development of an Experimental Watershed for Testing Nonpoint Source Pollution from Urban Runoff, Vassilios A. Tsihrintzis, Hector R. Fuentes and Rizwan Hamid, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1237-1241.
- Diesel May Clean Coal-Powered Plants, ET Oct./Nov. 94, p10-11.
- Dual-Sorbent Injection: Good and Bad News, ET Oct./ Nov. 94, p10.
- Dynamic Compaction to Remediate Liquefiable Embankment Foundation Soils, Karl Dise, Michael G. Stevens and J. Lawrence Von Thun, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p1-25.
- Eliminating Water Column Separation and Limiting Backspin at a 12,000-Horsepower Pumping Plant, Paul Otter, David Hoisington and David Raffel, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p435-445.
- Exploratory Studies Facility Test Implementation and Integration with Construction and Design, Deirdre M. Book, Ned Z. Elkins, Richard Kovach and Ronald D. Oliver, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1770-1773.
- The First Multipurpose Spent Fuel Container Reviewed by the U.S. Nuclear Regulatory Commission (USNRC), Ivan F. Stuart, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p467-476.
- Fracture Toughness of Compacted Cohesive Soils Using Ring Test, Jack A. Harison, Bobby O. Hardin and Kamyar Mahboub, GT May 94, p872-891.
- Gravity and Megnetic Investigations of Yucca Wash, Southwest Nevada, V. E. Langenheim and D. A. Ponce, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2272-2278.
- High-Strain Kinetic Testing of Deep Foundations, Alain E. Holeyman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p934-939.
- Hurricane Andrew The Ultimate Curtain Wall Test, James Hayes Larkin, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p424-429.
- In Situ Photothermal Deflection Spectroscopy of Uranium Dioxide Dissolution, James D. Rudnicki, Richard E. Russo and David W. Shoesmith, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2609-2615.
- Integrating Scientific Results for a Post-Closure Safety Demonstration, Edward C. Taylor, Lawrence D. Ramspott, Scott Sinnock and William M. Sprecher, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p301-305.
- The Interactive Process: A Formal Means to Improved Relations, Allen Benson, A. C. Robison, Paul E. Seidler and Michelle D. Ulick, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p56-62.

- Investigation and Design Concepts for a Nuclear Waste Repository in the Kola Peninsula of Northwest Russia, Nikolay N. Melnikov and William R. Sharp, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p523-529.
- Jointless Runway on Display in Illinois, CE Feb. 94, p12. Li, Qizhi, Richard A. Schultz, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2106-2111.
- grain Committee, 1994), p. 2106-2111.
 Mapping Fractures Using Fresnel Volume Tomography, D.
 W. Vasco, John E. Peterson, Jr. and E. L. Majer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2648-
- Metal Truss Plates: Less than Full-Depth Penetration and Shear Buckling, Keith F. Faherty, Gerri L. Peot nee Kocher and Matthew J. Mazza, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p695-700
- Michigan is First to Test European Pavement, CE Jan. 94, p14,18.
- Modification of Asphalt Binders: A Critical Evaluation Using the New SHRP Methods, H. U. Bahia, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p859-879.
- Modified Asphalts Tested in Pavement, CE Feb. 94, p8. More Testing for Composites, ET Oct./Nov. 94, p11.
- New Bridge-Deck Design, ET June/July 94, p10. New Solar Heating System, ET Oct./Nov. 94, p11.
- A Novel Gravity Compensation System for Space Robots, H. B. Brown, Jr. and J. M. Dolan, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p250-258.
- A Peice-wise Linear Evaluation of Masonry Infills Subjected to Out-of-plane Seiesmic Drift, R. Craig Henderson, W. Dale Jones, E. G. Burdette and Max L. Porter, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p803–808.
- Performance of Spun Prestressed Concrete Poles During Hurricane Andrew, Fouad H. Fouad, Norman L. Scott, Elizabeth Calvert and Michael Donovan, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p362-376.
- Prestress Force Effect on Vibration Frequency of Concrete Bridges, M. Saiidi, B. Douglas and S. Feng, ST July 94, p2233-2241.
- Qualification Leak Testing of the GA-4 and GA-9 Closure Seal Design, Richard H. Boonstra, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p923-930.
- Radiological Characterization of Hanford HLW Tank Farm Core Samples, Vojislav Banjac and A. Sharif Heger, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1110-1116.
- Rationale for Determining Spent Fuel Acquisitions for Repository Testing, Steven C. Marschman, Robert E. Einziger and Ray B. Stout, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1074-1079.
- Remote Infrared System for Scanning Hazardous Waste Tanks, Kim L. H. Morris, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1104-1109.
- Results of Drip Tests of Sludge-Based and Actinide-Doped Glasses, J. K. Bates and E. C. Buck, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1088-1101.
- Sandstone Materials Used as Riprap, Steven R. Abt, Mitchell R. Peters, Terry L. Johnson and Scott A. Hogan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p467-471.
- Simplified Soil-Nailing System Ready to Stanch Steep Embankments, ET Oct./Nov. 94, p8.
- Simulation of Autonomous Robotic Excavation, Regis Hoffman and Reid Simmons, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p115-122.

Site Characterization and Related Activities at the Potential High-Level Radioactive Waste Repository Site at Yucca Mountain, Nevada, Carl P. Gertz, Paul L. Cloke, Robert M. Nelson, Jr. and Maxwell B. Blanchard, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2291-2296.

Smart Highway to Monitor Traffic Loads and Climate, CE Feb. 94, p16-17.

Speeding Up Pavement Testing, ET Oct./Nov. 94, p10.

Splicing Strength of Welded Steel Mesh in Concrete Bridge Decks, Bilal M. Ayyub, Naji Al-Mutairi and Peter Chang, ST Aug. 94, p2532-2546.

Strategy for Passing the Civil P.E. Exam, John G. Everett and James T. Mitroka, El July 93, p269-278.

The Swept Sine Wave Testing Technique in Hydrodynam-ic Applications, Nicholas Haritos, Okey Nwogu and Andrew M. Cornett, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p533-546.

Tank-Testing Crawlers, ET June/July 94, p11.

Test and Evaluation Criteria for Side-Impact Roadside Appurtenance Collisions, M. H. Ray and J. F. Carney, III,

TE July/Aug. 94, p633-651.

Testing Conceptual Unsaturated Zone Flow Models for Yucca Mountain, Tim P. Brown, Linda L. Lehman and John L. Nieber, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1999-2006.

Testing Methods for Roof Systems, Phillip J. Smith, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani,

ed., 1994), p340-349.

Testing of Concrete Curtain Wall Panels Reinforced with FRP Grids, Edwin R. Schmeckpeper, Richard Nielsen and Charles H. Goodspeed, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1250-

Testing of Hollow Clay Tile Masonry Prisms, W. D. Jones and M. B. Butala, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1094-1099.

Thermal Qualification Testing of Efficient Neutron Shield Materials, Richard H. Boonstra, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p765-771.

TOPAZ II Qualification and Nuclear Testing Program, G. L. Schmidt, F. Thome, B. Ogloblin and E. Glushkov, Constitution, F. Hoome, B. Ugloblin and E. Glushkov, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p729-738.

TOPAZ II System Description, Susan S. Voss, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p717-

728.

Transition from the Functional Requirements to the Tech-nical Requirements Baseline, T. A. Mozhi, S. Douara, M. Senderling and T. Truong, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1641-1647.

Tunnel Boring Machine for Nuclear Waste Repository Research Project, Hans A. Janzon, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p403-410.

Usage of Adhesives and Composites in Highway Struc-tures, Hani G. Melhem and John R. Schlup, (Infrastructure: New Materials and Methods of Repair, Kim D.

Basham, ed., 1994), p983-990.

Verification Testing of Multi-Purpose Rail Cask Impact Limiters, Charles J. Temus, Ian D. McInnes, Ken Miller and Robert A. Johnson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p452-456.

What Do the Space Needle, the Peace Bridge and A Launch Pad Have in Common?, CE Dec. 94, p84.

3D Free Surface Flow Model Verification - A Panel Discussion on Test Cases, Sam S. Y. Wang, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p910-912.

Behavior of Two-Span Continuous Bridge Under Truck Axle Loading, Jane L. Tiedeman, Pedro Albrecht and Lloyd R. Cayes, ST Apr. 93, p1234-1250.

The Behaviour and Design of Stressed-Arch (Strarch) Frames, Murray J. Clarke and Gregory J. Hancock, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p200-209.

Behaviour of Concrete Masonry Infill - Steel Frame Struc-tures, J. L. Dawe and C. K. Seah, (Analysis and Compu-tation, Franklin Y. Cheng, ed., 1994), p67-76. A Characterization Study of Fractured Rock, Kenzi Karasaki, Barry Freifeld and Cliff Davison, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2423-2428.

Comparison of Unconfined- and Confined-Creep Tests for Hot Mix Asphalt, E. R. Brown and Kee Y. Foo, MT May 94, p307-326.

678

Consolidation Settlements and Pore Pressure Dissipation, Demetrious C. Koutsoftas and Raymond K. H. Cheung, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1100-1110.

Corrosion Fatigue of Stiffened Offshore Steel Tubular Joints, D. S. Ramachandra Murthy, A. G. Madhava Rao and A. R. Santhakumar, ST July 94, p1991-2010.

Critique of Commercial Structures, Herbert S. Saffir, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p472-475.

Cyclic Behavior of Partially Saturated Collapsible Soils Subjected to Water Permeation, Kenji Ishihara and Kenji Harada, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p34-50.

Design Guidelines for the Use of Debonded Strands, Bruce W. Russell and Ned H. Burns, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p618-

623.

Dual-Sorbent Injection: Good and Bad News, ET Oct./ Nov. 94, p10.

Ductility of Concrete-Filled Steel Box Columns under Cyclic Loading, Tsutomu Usami and Hanbin Ge, ST July 94, p2021-2040.

Effect of Materials Architecture on Strengthening Efficiency of Composite Wraps for Deteriorating Columns in the North-East, I. Howie and V. M. Karbhari, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p199-206.

Effects of Crumb Rubber Type and Content on Performance Related Properties of Asphalt Binders, H. U. Bahia and R. Davies, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p449-

Experimental Behavior of Polymeric Geogrids in Pullout, Ragui F. Wilson-Fahmy, Robert M. Koerner and Leon-ard J. Sansone, GT Apr. 94, p661-677.

Flexural Analysis of Reinforced Concrete Beams Containing Steel Fibers, Byung Hwan Oh, ST Oct. 92, p2821-

Flexural Strength of Profiled Beams, Deric J. Oehlers, Howard D. Wright and Matthew J. Burnet, ST Feb. 94,

Homogeneity Tests Based Upon Gumbel Distribution, Heinz D. Fill and Jery R. Stedinger, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p790-793.

An Improved Design of Excluding Sediment into River Intake Structures, Wu-Sung Ke, Sue-Jen Wu and Cheyuan Huang, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1193-

Improving Dynamic Finite Element Models Using Test Data, N. S. Khot and D. E. Veley, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p18-26.

Investigating the Behavior of a Lattice Structural Section, L. Shan and M. Hanson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p725-730.

- Lateral Foundation Deformations for a Marine Test Fill, Demetrious C. Koutsoftas, (Vertical and Horizontal De-formations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1111-1123.
- Liquefaction Mechanism for Layered Soils, Gregg L. Fiegel and Bruce L. Kutter, GT Apr. 94, p737-755.
- Natural Decay Resistance of Glued-Laminated Beams, Stephen L. Quarles, Kevin A. Flynn, William A. Dost and Mark G. Dietz, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p707-712.
- New Concept for Wrapping Columns with a High Strength Fiber/Epoxy System, Edward R. Fyfe, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1156-1162.
- Paste Rheology, Leslie J. Struble and Mark A. Schultz, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p147-158.
- Pilot Test on Groundwater Organics Removal by Low-Pressure Membranes, Paul Fu, Hector Ruiz, Ken Thompson and Carl Spangenberg, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p336-343.
- Probabilistic Evaluation of Human Perception Threshold of Horizontal Vibration of Buildings (0.125Hz to 6.0Hz), Jun Kanda, Yukio Tamura, Kunio Fujii, Tamio Ohtsuki, Kiyoto Shioya and Shinji Nakata, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p648-653.
- Proposed Test Method for Determining Bending Yield Moment of Nails, John H. Showalter, Jr. and David G. Pollock, Jr., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p918-922.
- Recent Developments in Physical Testing of Aggregates to Ensure Durable Concrete, C. A. Rogers and S. A. Senior, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994),
- Resilient Modulus Test Protocol for Cement Stabilized Phosphogypsum, Michael I. Pericleous and John B. Metcalf, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p491-498.
- Shallow Tunnels in Cohesionless Soil: Stability of Tunnel Face, Pierre Chambon and Jean-François Corté, GT July 94, p1148-1165.
- Simulated Waste Package Test in Salt, Hemendra N. Kalia, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1930-1937.
- Stack Emissions Monitor May Offer Compliance Proof, CE Dec. 94, p17.
- Statistical Considerations on Large-Scale Geomechanics Test Design For Nuclear Waste Repository Characterization, Kunsoo Kim and Hang Gao, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1922-1929.
- Steel-Deck-Reinforced Concrete Diaphragms. I, W. Samu-el Easterling and Max L. Porter, ST Feb. 94, p560-576.
- Strength of New Heat Treated Window Glass Lites and Laminated Glass Units, H. Scott Norville, Paul M. Bove, Darrel L. Sheridan and Stacey L. Lawrence, ST Mar. 93, p891-901.
- Strontium Isotope Geochemistry of Soil and Playa Deposits Near Yucca Mountain, Nevada, Brian D. Marshall and Shannon A. Mahan, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2685-2691.
- Structural Evaluation of Airfield Rigid Pavements Using Falling Weight Deflectometer, Boming Tang, TE May/ June 93, p467-476.
- Swelling of Black Cotton Soil Using Centrifuge Modeling, A. D. Gadre and V. S. Chandrasekaran, GT May 94, p914-919.
- Test Experience with Heavy Angle Dead End Lattice Transmission Towers, J. M. Ferguson, D. D. Cannon and R. E. Nickerson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p601-606.

- The Testing of Thermal-Mechanical-Hydrological-Chemical Processes Using a Large Block, W. Lin, D. G. Wilder, J. A. Blink, S. C. Blair, T. A. Buscheck, D. A. Chesnut, W. E. Glassley, K. Lee and J. J. Roberts, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1938-
- Tests for Flow along Vertically Stratified Porous-Media Interfaces, Ronald B. Manila, Jr. and J. Jeffrey Peirce, EE May/June 94, p527-542.
- Tests of Full-Size Pretensioned AASHTO Beams with Debonded Strands, O. Abdalla, J. A. Ramirez and R. H. Lee, (Structures Congress XII, N. C. Baker, ed. and Barry I. Leeden ed. 1000 - 1000 Barry J. Loodno, ed., 1994), p1409-1414.
- Tests of Yielding Anchorages Under Monotonic Loadings John F. Bonacci and Jorge Marquez, ST Mar. 94, p987-
- Use of An Analog Site Near Raymond, California, To Develop Equipment and Methods for Characterizing a Potential High-Level, Nuclear Waste Repository Site at Yucca Mountain, Nevada, Amjad M. J. Umari, Arthur Geldon, Gary Patterson, James Gemmell, John Earle and Jon Darnell, (High Level Radioactive Waste Management. High Level Radioactive Waste Program Committee, 1994), p2413-2422.
- Use of Synthetic Fibers for Reinforcement of Thin Sheet Cement Products, Nazmi Sharabi, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed.,
- 1994), p545-550. Using a Small Satellite Bus As a Dedicated Platform for On-Orbit CSI Experiments, Andrew S. Bicos and Gregory G. Loboda, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley
- Lokaj, ed., 1994), p37-46. Void Mortar Joints: Bane of Brick Masonry, Clayford T. Grimm, CO Mar. 94, p152-161.

- Austin's Strategy for Integrated Water Resource Planning, Tony T. Gregg, Maureen McReynolds and Eric Rothstein, (Revenue Enhancement for Water and Wastewater Systems, Jerry R. Rogers, ed. and William P. Bullock, Jr., ed., 1994), p1-7.
- Coal Ash and Dredged Material in Reef Construction, William B. Baker, Jr. and Richard F. Gorini, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p664-672
- Construction of the Baytown Bridge, Houston, Man-Chung Tang, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p666-671. Contractor Entitled to Recover Damages from Project
- Lender, CE May 94, p30.
- Developing Design Parameters for Constructing Ecologically Functional Marshes Using Dredged Material in Galveston Bay, Texas, Lawrence P. Rozas and Roger J. Zimmerman, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p810-822
- Do We Need More Waterbird Nesting Islands in Galveston Bay, Texas? (and if so, how and where do we build them?), Phil Glass, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p796-809.
- Evolution of Beneficial Uses of Dredged Materials for Over 200 Million Cubic Yards of Dredged Material in Galveston Bay, Texas Part II - Framework & Approach, Mike Jansky, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p843-846.
- Fort Bend County Surface Water Supply Study, Martha F. Juch and David E. Winslow, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p214-217.
- Freshwater-Inflow Need of Estuary Computed by Texas Estuarine MP Model, Junji Matsumoto, Gary Powell and David Brock, WR Sept./Oct. 94, p693-714.
- Galveston Bay 3D Model Study, Channel Deepening, Cir-culation, and Salinity Results, R. Berger, W. Martin, R. McAdory and J. Schmidt, Cestuarine and Coastal Mod-eling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p1-13.
- Habitat Considerations: Galveston Bay Demonstration Marsh, Andrew V. Sipocz, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p823-827.

Plans, Design, and Construction of a 100-Hectare Intertidal Demonstration Marsh Using Large-Scale Cutter Head Dredging Equipment in Galveston Bay, Texas, Keith P. Kindle, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p833-842.

Planting of Large-Scale Marsh Projects, Eddie Seidensticker, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p828-832.

San Antonio First in Smart-Highway Class, CE Aug. 94, p10,12.

Smart Highways Graduate to Next Class, CE Oct. 94, p24.
Solving Collections Problems to Increase Revenue: The Houston Experience, 1988-1993, Karen Philippi, (Revenue Enhancement for Water and Wastewater Systems, Jerry R. Rogers, ed. and William P. Bullock, Jr., ed., 1994), p8-14.

Start-ups, CE Apr. 94, p8.

Start-ups, CE Aug. 94, p8

Surprises Uncovered at Jet-Crash Sites, CE Mar. 94, p24. Texas Asphalt Mix: Greater Strength, Less Filling, ET June/July 94, p7.

Textiles

Continuous Treatment of Textile Water by Ozonation and Coagulation, Sheng H. Lin and Wen Y. Liu, EE Mar./ Apr. 94, p437-446.

Theorie

NCASI Experiment Related to Validation of Equilibrium Partitioning (EP) Theory, Steven W. Hinton, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p737-742.

Nonlinear Analysis of Angle-Ply Composite and Sandwich Laminates, T. Kant and J. R. Kommineni, AS July 94, p342-352.

Thermal analysis

Above and Below Boiling Thermal Loading Strategies for Large Waste Packages, Marvin L. Smith, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2146-2151.

The Application of Thermal Rock Bolts in the Thermal Design of a Nuclear Waste Repository, George Danko, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), n890-898

A Comparison of Spent-Fuel Shipping Cask Response to 10 CFR 71 Normal Conditions and Realistic Hot Day Extremes, Steven James Manson and Steven Eric Gianoulakis, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p788-795.

Design and Analysis of the 712 Fifth Avenue Structure, Louis A. Occhicone and Stanley Wojnowski, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1556-1561.

Heat Transfer Modeling in Burial Sites Containing Heat-Generating Waste, Mohamed Alsharif, Iqbal Ahmed and Paul Dickman, (High Level Radioactive Waste Management. High Level Radioactive Waste Program Commit-

ment, High Level Radioactive Waste Program Committee, 1994), 8899-906. Mechanics of Curved Fiber Bundles in Composites, David W. Jensen, Suresh P. Pai, Timothy R. Pickenheim and Colleen M. McCarty, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p276-286.

Stanley Lokaj, ed., 1994), p276-286.
Simulation of Heat Transfer Around a Canister Placed Horizontally in a Drift, Samir Moujaes and Akshay Bhargava, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994).

p801-808. Site Characterization Plan Thermal Goals Reevaluation, Steven F. Saterlie and J. C. de la Garza, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p882-889.

Subrepository Scale Hydrothermal Analysis in Support of Total System Performance Assessment at Yucca Mountain, Srikanta Mishra, (*High Level Radioactive Waste Management*, High Level Radioactive Waste Program Committee, 1994), p1202-1213. Thermal Finite Element Analyses of 26 Waste Package Spent Nuclear Fuel Loading Configurations, A. O. Thompson and M. J. Pliniski, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p796-800.

Thermal Performance of a Depleted Uranium Shielded Storage, Transportation, and Disposal Package, S. D. Wix and H. R. Yoshimura, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p877-881.

Thermal Response in Antenna Under Laser Irradiation, Leslie A. Blackham and Arsalan Razani, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p196-205.

Garloway, et., and Statiley Coxal, et., 1994), p190-203. Thermo-Hydrodynamic Modelling of the Chicago Sanitary and Ship Canal, Ejaz Mohammad and Forrest M. Holly, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1306-1310.

Thermal energy

Field-Test Results of Aquifer Thermal Energy Storage at St. Paul, Minnesota, M. Hoyer, J. Hallgren, S. Eisenreich and R. Sterling, EY Aug. 94, p67-85.

Thermal factors

Fluxes and Mineralizers in the Clinkering Process, A. Palomo, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p64.

Methods to Mitigate Thermally Induced Distortion, Fred M. Cutting, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p514-523.

Mixing of Thermal Discharges at Low Froude Numbers, C. Liang Lee and Patrick J. Ryan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p538-542.

Near-Field Thermal Calculations for Individual Waste Package Placement, Suresh Lingineni, (High Level Radiooactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p611-618.

The Testing of Thermal-Mechanical-Hydrological-Chemical Processes Using a Large Block, W. Lin, D. G. Wilder, J. A. Blink, S. C. Blair, T. A. Buscheck, D. A. Chesnut, W. E. Glassley, K. Lee and J. J. Roberts, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1938-1945.

Thermal pollution

Evaluation of Thermo-Hydrological Performance in Support of the Thermal Loading Systems Study, Thomas A. Buscheck, John J. Nitao and Steven F. Saterlie, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p592-610.

FY93 Thermal Loading Systems Study, Steven F. Saterlie and Brent H. Thomson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p573-585.

Impacts of Repository Thermal Loading on System Cost, L. D. Rickertsen and W. W. Matyskiela, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p586-591.

Thermal power plants

Conjunctive Operation of Hydroelectric and Thermal Power Plants, Ricardo Harboe, Tirtha Raj Gautam and Pushpa Raj Onta, WR Nov./Dec. 94, p778-793.

Structure of River Turbulence Behind Warm Water Discharge, Vladimir I. Nikora, Paweł Rowiński, Aleksander Suchodolov and Dariusz Krasuski, HY Feb. 94, p191-208

Thermal properties

Identifying Significant Uncertainties in Thermally Dependent Processes for Repository Performance Analysis, James D. Gansemer and Alan Lamont, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2197-2206.

Waste Program Committee, 1994), p2197-2206.
Postbuckling of Moderately Thick Circular Plates With Edge Elastic Restraint, G. Venkateswara Rao, N. Rajasekhara Naidu and K. Kanaka Raju, EM Oct. 94, n2232-2238.

Thermal Cycling of Thin and Thick Ply Composites, Stephen S. Tompkins, James Y. Shen and Andre J. Lavoie, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p326-335.

Thermal resistance

Thermal Conductivity of Earth Blocks, Joe O. Akin-musuru, MT Aug. 94, p341-351.

Thermal Qualification Testing of Efficient Neutron Shield Materials, Richard H. Boonstra, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p765-771.

Thermal Response of the Waste Package/MPC and EBS, Robert H. Bahney, III and Thomas W. Doering, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p809-815.

Thermal stratification

Description of the Application of Goal Programming for Selective Withdrawal Structure Operation, D. G. Fontane and M. L. Schneider, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p400-403.

Assessment of Risk of Thermal Cracking in Hardening Concrete, Mats Emborg and Stig Bernander, ST Oct. 94, p2893-2912.

Axisymmetric Vibrations of Thick-Walled Cylindrical Tubes in the Presence of Thermal Residual Stresses, Victor Birman, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p257-265.

Case Studies: Clay Cover Cracking Analysis Using FEM Techniques, Robert Y. Liang, John C. Lommler, Suckhong Lee and Bob Meyers, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p86-101.

Edge Strength of Window Glass by Mechanical Test, Chris P. Pantelides, Gregory P. Sallee and Joseph E. Minor, EM May 94, p1076-1090.

Effect of Temperature Changes on Water-Main Breaks, Ahmad Habibian, TE Mar./Apr. 94, p312-321.

Finite-Element Modeling of Deformation and Cracking in Early-Age Concrete, René de Borst and A. H. van den Boogaard, EM Dec. 94, p2519-2534.

Thermal and Seismic Impacts on the North Ramp at Yucca Mountain, M. Lin, M. P. Hardy and J. Jung, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1971-1978.

Thermal Stresses in Piezoelectric Materials: A Boundary Integral Formulation, J. S. Lee and L. Z. Jiang, (Engl. neering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p336-347.

Three-Dimensional Solutions for Initially Stressed Structural Sandwiches, Ahmed K. Noor, Jeanne M. Peters and W. Scott Burton, EM Feb. 94, p284-303.

Three-Dimensional Solutions for Thermomechanical Stresses in Sandwich Panels and Shells, W. Scott Burton and Ahmed K. Noor, EM Oct. 94, p2044-2071.

Viscoplastic Response of Structures for Intense Local Heating, Earl A. Thornton and J. D. Kolenski, AS Jan. 94, p50-71.

Thermal utilization

Pilot-Scale Demonstrations of Thermal Desorption for the Treatment of Contaminated River Sediment, B. Thomas Kenna, David Conboy, Judith Leithner, Daniel Averett and Stephen Yaksich, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p474-483.

Thermocouples

Evaluation of a 6-Wire Thermocouple Psychrometer for Determination of In-Situ Water Potentials, Carole L. Loskot, Joseph P. Rousseau and Mark A. Kurzmack, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2084-2091.

Thermodynamics

The Influence of Kiln Atmosphere on Clinker Characteristics, F. P. Sorrentino, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p65-78.
Progress in Understanding the Structure and Thermody.

namics of Calcium Silicate Hydrates, Annemarie Meike, Maria Onofrei, Carol J. Bruton and Brian E. Viani, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2590-2596.

Thermoelasticity
Axisymmetric Vibrations of Thick-Walled Cylindrical Tubes in the Presence of Thermal Residual Stresses, Victor Birman, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p257-265.

Thermoelastic Theory of Cylindrical Sandwich Shells with Piezoelectric Sensors or Actuators, Victor Birman, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p80-88.

Thermography Remote Sensing Pipeline Rehabilitation Methodologies Based Upon the Utilization of Infrared Thermography, Gary J. Weil, Richard J. Graf and Leann M. Forister, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p173-181.

Thermoplasticity

Convergence Rates of the Method of Successive Elastic Solutions in Thermoplastic Problems of a Layered Concentric Cylinder, Todd O. Williams and Marek-Jerzy Findera, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p348-357.

Thermoplastic Stabilization of MSW Combustor Ash, Vincent T. Breslin and Shawn E. Tisdell, EE Jan./Feb. 94, p154-168.

Thicknes

Effect of Roughness and Thickness of Biofilms on External Mass Transfer Resistance, Tian C. Zhang, Paul L. Bish-op and James T. Gibbs, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p593-600.

Estimation of the Thickness of Transition Zone in Concrete and Characteristics of Transition Zone in High-Strength Concrete, Hiroshi Uchikawa, Shunsuke Hanehara and Daisuke Sawaki, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p616.

Minimum Thickness of Compacted Soil Liners: I. Stochastic Models, Craig H. Benson and David E. Daniel, GT Jan. 94, p129-152.

Minimum Thickness of Compacted Soil Liners: II. Analysis and Case Histories, Craig H. Benson and David E. Daniel, GT Jan. 94, p153-172.

Stability of Skew Mindlin Plates under Isotropic In-Plane Pressure, C. M. Wang, S. Kitipornchai, Y. Xiang and K.

M. Liew, EM Feb. 93, p393-401.
Using Cavity Well to Determine Aquifer Thickness and Constants, Mohammad Saleem, IR May/June 94, p504-

Thin shell structures

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Thin wall sections

Bridge Diaphragm Elements with Partial Warping Re-straint, C. C. Fu and Yao T. Hsu, ST Nov. 94, p3388-

Rotational Centers of Plates Regulating Distortion of Box Girders, Tsuneo Usuki, ST Sept. 94, p2602-2622.

Thin wall structures

Comparison of Simple and Chebychev Polynomials in Rayleigh-Ritz Analysis, Sarvesh Singhvi and Rakesh K. Kapania, EM Oct. 94, p2126-2135.

Continuum Model for Analysis of Multiply Connected Per-forated Cores, Domenico Capuani, Marco Savoia and Ferdinando Laudiero, EM Aug. 94, p1641-1660. Equations for Tapered Thin-Walled Beams of Generic Open Section, Sundaramoorthy Rajasekaran, EM Aug.

94, p1607-1629.

57, p100/1-1029.

Experimental Study of Thin Steel-Plate Shear Walls under Cyclic Load, Vincent Caccese, Mohamed Elgaaly and Ruobo Chen, ST Feb. 93, p573-587.

Finite Element Analysis of Thin-Walled Curved Beams Made of Composites, G. S. Palani and Sundaramoorthy Pagesparan ST Aug. 9, 2020-2030. Rajasekaran, ST Aug. 92, p2039-2062.

Finite Element Method for Buckling Analysis of Plate Structures, Chee-Kiong Chin, Faris G. A. Al-Bermani and Sritawat Kitipornehai, ST Apr. 93, p1048-1068. Instability of Tapered Thin-Walled Beams of Generic Sec-

Sundaramoorthy Rajasekaran, EM Aug. 94, p1630-1640.

Out-of-Plane Buckling of Restrained Thin Rings of General Open Section, J. G. Teng and R. M. Lucas, EM May 94, p929-948.

Thornton, Stafford E.

Stafford Thornton Becomes ASCE's 126th President, CE Nov. 94, p74-76.

Thornton, Stafford J.

California Blimp Hangars, Framed in Wood, Are Land-marks, CE Oct. 94, p70.

Three-dimensional analysis

3-Dimensional Processes Along Sandy Beaches - Dimensions of a Coastal Facility, Ida Brøker, Hakeem Johnson, Erik Asp Hansen, Ann Skou, Peter Justesen and Rolf Deigaard, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p103-113.

3D Simulation of End-Plate Bolted Connections, Archibald N. Sherbourne and Mohammed R. Bahaari, ST Nov. 94,

p3122-3136.

Alternative Approach to Estimation of Critical Cornering Speed, John D. Leonard, II, TE May/June 94, p478-496.

Speed, John D. Leonard, II, TE May/June 94, p478-496. Automated Design of 3-D Highway Sign Bridge Structures, C. C. Fu, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p930-937. Constraining Local 3-D Models of the Saturated-Zone, Yucca Mountain, Nevada, G. E. Barr and Sharon A. Shannon, (High Level Radioactive Waste Management, Light Level Bedicetting Wester Descent Convintion. High Level Radioactive Waste Program Committee, 1994), p1814-1821.

Experimental Study of Three-Dimensional Wave Breaking, K. She, C. A. Greated and W. J. Easson, WW Jan./Feb. 94, p20-36.

Gateway to Columbus, John Hillman and Daniel K. Bur-

roughs, CE Dec. 94, p58-61. Horizontal and Vertical Movements of Bridge Piers Subjected to Ship Impact, Naresh C. Samtani, Jaw-Nan Wang, Frank Pepe, Jr. and Michael J. Abrahams, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p245-256.

Nonlinear Three Dimensional Analysis of Downdrag on Pile Groups, Sangseom Jeong and Jean-Louis Briaud, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y.

Félio, ed., 1994), p1366-1384.

Recent Advances in 3D Non-Linear FE-Analysis of R/C and P/C Beam Structures, Franz-Josef Ulm, Jean-Luc Clément and Johann Guggenberger, (Structures Con-gress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1427-1432.

Three-Dimensional Analysis of Flexible Circular Culverts, Ian D. Moore and Richard W. Brachman, GT Oct. 94,

Programmer of a Multiple Bar System, Kathelijne M. Wijnberg and Felix C. J. Wolf, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p59-73.

Three-Dimensional Seismic Analysis of La Villita Dam, A.-W. Elgamal, GT Dec. 92, p1937-1958.

Three-Dimensional Solutions for Initially Stressed Structural Sandwiches, Ahmed K. Noor, Jeanne M. Peters and W. Scott Burton, EM Feb. 94, p284-303. Three-Dimensional Solutions for Thermomechanical Stresses in Sandwich Panels and Shells, W. Scott Burton and Ahmed K. Noor, EM Oct. 94, p2044-2071.

Three-dimensional flow

Hydrodynamic Behavior of Compound Rectangular Open Channels, Dan Naot, Iehisa Nezu and Hiroji Nakagawa, HY Mar. 93, p390-408.

Statistical Sample Size for Construction of Soil Liners, Craig H. Benson, Huaming Zhai and Salwa M. Rashad, GT Oct. 94, p1704-1724.

Three-dimensional models

Bridge, I. E. Harik, D. L. Allen, R. L. Street, M. Guo, R. C. Graves, J. Harison and M. J. Gawry, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1112-1117.

3D CAD Modeling and Graphical Simulation of Mobile Cranes, Parmanand V. Dharwadkar, James T. O'Connor and Thomas M. Gatton, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p539-546.

3D Free Surface Flow Model Verification - A Panel Discussion on Test Cases, Sam S. Y. Wang, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p910-912.

3D model verification for a groyne and harbor experiment, P. Mewis and K. -P. Holz, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p905-909.

Advances in 3D Modelling of Wave-Driven Currents, Philippe Péchon, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p366-375.

Anisotropic Plasticity Model for Foams and Honeycombs, H. L. Schreyer, Q. H. Zuo and A. K. Maji, EM Sept. 94, p1913-1930. Comparison of 2D and 3D Models for Computing Shallow

Water Tides in a Friction-Dominated Tidal Embayment, R. R. Grenier, R. A. Luettich, Jr. and J. J. Westerink, (Es-R. R. Orenter, R. A. Luetten, Jr. and J. J. Westermk, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p58-70.

Composite 2D/3D Hydroelastic-Analysis Method for Floating Structures, Xiling Che, H. Ronald Riggs and R. Cengiz Ertekin, EM July 94, p1499-1520. Computer-Aided Cleanup, Jim Williams and Barney Jones,

CE Oct. 94, p46-49.

Computer-Integrated Construction, Bruce C. Coles and Kenneth F. Reinschmidt, CE June 94, p50-53.

Development and Application of a Three-Dimensional Boundary-Fitted Circulation Model in Providence River, Muslim Muin and Malcolm Spaulding, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p432-446.

Development of Long-Term Three-Dimensional Hydrody-namics in Long Island Sound for Use in Water Quality Modeling, Richard A. Schmalz, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Ru-

mer, ed., 1994), p1316-1320.

Development of the Tampa Bay Tidal Current Atlas, Kurt W. Hess, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p489-499

Flat Plates with Regular and Irregular Column Layouts.I: Analysis, Kolbjorn Saether, ST May 94, p1563-1579.

Generating Reinforcement in FE Modeling of Concrete Structures, Fariborz Barzegar and Srinivas Maddipudi, ST May 94, p1656-1662.

Geometric-Based Reasoning System for Project Planning, A. A. Morad and Y. J. Beliveau, CP Jan. 94, p52-71.

A. A. Moraa and Y. J. Beirveau, C. P. Jan. 94, 52-71.
Graphic Visualization for Planning Heavy Lifts, Parmanand V. Dharwadkar, Koshy Varghese, James T.
O'Connor and Thomas M. Gatton, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p759-766.
Modeling 3-D Ground Water Mounding, Tswn-Syau Tsay, John Hoopes, Salwa Rashad and Yahia Majali, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p317-321.

Modeling 3D Ground-Water Flow by Modified Finite-Element Method, Fang Xin Yu and Vijay P. Singh, IR Sept./Oct. 94, p892-909.

New Acoustic Meter for Measuring 3D Laboratory Flows, Nicholas C. Kraus, Atle Lohrmann and Ramon Cabrera, HY Mar. 94, p406-412.

Numerical Decomposition of Eulerian Residual Circulation in Long Island Sound, Richard A. Schmalz, Jr., (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p294-308.

Observations Related to the Use of the Sigma Coordinate Transformation for Estuarine and Coastal Modeling Studies, John F. Paul, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p336-350.

OTF Kinematic GPS Positioning for Vertical Reference Datum, Al Rougeau, Dean Pottle and Larry Rosenbalm, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p288-

Overlaying Digital Images with 3-D CAD to Document as Built Construction, Karl A. Raynar and Gary R. Smith, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p751-758.

PSF-PM Verification of 3D Free Surface Flow Models, Sam S. Y. Wang and F. Mauricio Toro-Botero, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p895-899.

The Role of Computer Graphics in Teleoperation, Antal K. Bejczy, Won-Soo Kim and Paul S. Schenker, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p1-9.

San Francisco Bay Test Case for 3-D Model Verification, Peter E. Smith, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p885-

Seismic Vulnerability of Flat Slab - Core Buildings, Somaprasad R. Hosahalli and Ahmet E. Aktan, ST Feb. 94, p339-359.

Simulation of Autonomous Robotic Excavation, Regis Hoffman and Reid Simmons, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p115-122.

Solutions of Primitive Equations for Three-dimensional Tidal Circulation, Vincenzo Casulli and Ralph T. Cheng, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p396-

Structural Response to 3D Simulated Earthquake Motions in San Bernardino Valley, Erdal Şafak and Arthur Frankel, ST Oct. 94, p2820-2839.

Three Dimensional Modeling of Circulation and Salinity in Mt. Hope Bay and the Lower Taunton River, Wenrui Huang and Malcolm M. Spaulding, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p500-508.

Three Dimensional Modelling of Estuarine Sediment Transport, A. Malcherek, C. LeNormant, E. Peltier, C. Teisson, M. Markofsky and W. Zielke, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and

Craig Swanson, ed., 1994), p42-57.

Three-dimensional Modeling for Improving Construction Process Performance, Amarjit Singh, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1156-1163.

Verification of a Three-Dimensional Model of Delaware Bay, K. W. Kim, B. H. Johnson and J. Gebert, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph

R. Rumer, ed., 1994), p574-578.

A Wind Driven Lake Circulation Finite Element Model for the Upper St. Marys River, E. M. Yuen and J. A. McCorquodale, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p584-

Thrust

Three-Dimensional Analysis of Flexible Circular Culverts, Ian D. Moore and Richard W. Brachman, GT Oct. 94, p1829-1844.

Tidal currents

Development of the Tampa Bay Tidal Current Atlas, Kurt W. Hess, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p489-499.

Field Performance of an Acoustic Scour-Depth Monitoring System, Robert R. Mason, Jr. and D. Max Sheppard, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed.,

1994), p366-375

Numerical Model Verification on Tidal Current in Tokyo Bay, Yoshitaka Fukui, Toshio Kodama and Mutsuto Kawahara, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p880-

Three Dimensional Modeling of Circulation and Salinity in Mt. Hope Bay and the Lower Taunton River, Wenrui Huang and Malcolm M. Spaulding, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p500-508.

Tidal effects

Boundary Forcing and a Dual-Mode Calculation Scheme for Coastal Tidal Models Using Step-Wise Bathymetry, James K. Lewis, Y. Larry Hsu and Alan F. Blumberg, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p422-431

Diffusion Hydrodynamic Model of Shallow Estuary, G. L. Guymon, M. N. Khan, M. Collins and T. V. Hromadka,

WR Mar./Apr. 94, p253-266.

Issues Related to Modeling the Transport of Suspended Sediments in Northern San Francisco Bay, California, Felin Thomas McDonald and Ralph T. Cheng, (Estua-rine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p551-564.

A Modern Electric Stepgauge for Accurate Wave and Tide Measurement, Harmen C. Botma and John B. Leenhouts, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p708-

Pollution Susceptibility of Well-Mixed Tidal Basins, Joseph L. DiLorenzo, Rhomaios V. Ram, Poshu Huang and Tavit O. Najarian, WW July/Aug. 94, p404-422.

Environmental Modeling of Coastal Wetlands, Lisa C. Roig and Robert A. Evans, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p522-535.

Habitat Considerations: Galveston Bay Demonstration Marsh, Andrew V. Sipocz, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p823-827.

Habitat Restoration Using Dredged Material: The Sonoma Baylands Wetland Demonstration Project, Scott P. Miner, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p928-937.

Plans, Design, and Construction of a 100-Hectare Intertidal Demonstration Marsh Using Large-Scale Cutter Head Dredging Equipment in Galveston Bay, Texas, Keith P. Kindle, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p833-842.

Use of Abandoned Pipeline to Transport Sediment to Marshes, Charles H. Coates, Jr., (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1101-1110.

Ambrose, R. B. T. S. Wu and S. C. McCutcheon, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p890-894.

Development and Application of a Three-Dimensional Boundary-Fitted Circulation Model in Providence River, Muslim Muin and Malcolm Spaulding, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p432-446.

Flow and Chloride Transport in the Tidal Hudson River, NY, Lawrence A. Weiss, Raymond W. Schaffranek and M. Peter de Vries, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

p1300-1305.

Solutions of Primitive Equations for Three-dimensional Tidal Circulation, Vincenzo Casulli and Ralph T. Cheng, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p396-

Tides

Boundary Forcing and a Dual-Mode Calculation Scheme for Coastal Tidal Models Using Step-Wise Bathymetry, James K. Lewis, Y. Larry Hsu and Alan F. Blumberg, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p422-431.

Comparison of 2D and 3D Models for Computing Shallow Water Tides in a Friction-Dominated Tidal Embayment, R. R. Grenier, R. A. Luettich, Jr. and J. J. Westerink, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p58-70.

Dredging Impacts on Delaware Estuary Tides, Joseph L. DiLorenzo, Poshu Huang, M. Llewellyn Thatcher and Tavit O. Najarian, (Estuarine and Coastal Modeling III, Malcoln L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p86-104.

Joint Probability of Superelevated Water Levels and Wave Heights at Duck, North Carolina, Douglas A. Gaffney and Gregory L. Williams, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p905-917.

A Numerical Study of Hydraulic Jump and Mixing in a Stratified Channel With a Sill, Ping Chen, R. Grant Ingram and Jianping Gan, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p119-133.

Simulating Effects of Highway Embankments on Estuarine Circulation, Jonathan K. Lee, Raymond W. Schaffranek and Robert A. Baltzer, WW Mar./Apr. 94, p199-218.

leback restraint systems

Contracting for Tiedback Walls on a Design-Build Basis, Hubert J. Deaton, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p17-23.

Ground Movements from Model Tieback Wall Construction, Christopher G. Mueller, James H. Long, Edward J. Cording and David E. Weatherby, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1337-1352.

Racine's Water Street Retaining Wall, Steven W. Hunt, Randy L. Frank, Paul A. Tarvin and James J. Blazek, (Serviceability of Earth Retaining Structures, Richard J.

Finno, ed., 1994), p137-154.

Temporary Shoring Support Systems in an Urban Environment, John E. Reinfurt, Thomas C. Anderson, Paul Reitz and Tony Licari, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p24-42.

Waterproofing a Structural Slab at Ground Anchor Locations, David L. Druss, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p77-92.

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Ties

Strut-Tie Model Design of Disturbed Regions in Concrete Structures, Y. M. Yun, A. Alshegeir and J. A. Ramirez, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p233-238.

Timber construction

Assessment of Building Damage Sustained During Hurricane Iniki (Comparison with Hurricane Iwa), Michael K. H. Yee and Arthur N. L. Chiu, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p102-110.

Characteristics of the US Highway Bridge Population, Kenneth F. Dunker and Basile G. Rabbat, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p1006-1013.

Creep Behavior of Structural Timber under Varying Humidity Conditions, Annika Martensson, ST Sept. 94, p2565-2582.

Elevated Walkways Rise Above Impact on Environment,

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Failure Stages in Timber Fixed Piers: Design for Minimal Reconstruction After a Storm, Jon Guerry Taylor and Mark D. Bolchoz, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p406-413. Fiber-Glass Composite Aircraft Pad for Crop Dusting,

Srinivasa L. Iyer, Vijayakumar Ranganathan and Terry Gross, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p743-750.

Fracture Analysis of Bolted Timber Connections, Ian Smith and Lin J. Hu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p912-917.

Harmonization of Reliability-Based Timber Engineering Codes and Standards, Ronald W. Anthony and Jozsef Bodig, (Structures Congress XII, N. C. Baker, ed. and

Bong, Structures Congress Att. N. C. Baker, ed. aint Barry J. Loodno, ed., 1994), p503-507. Load Duration Effects in an 85-Year-Old Timber Structure, J. B. Mitchell, K. J. Fridley, M. O. Hunt and J. F. Senft, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p73-78.

Metal Truss Plates: Less than Full-Depth Penetration and Shear Buckling, Keith F. Faherty, Gerri L. Peot nee Kocher and Matthew J. Mazza, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p695-700.

New Guidelines for Southern Pine Uses in Coastal Marine Construction, Ion Guerry Taylor, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p480-488.

Performance of Plywood and OSB Sheathing During Hurricanes Andrew and Iniki, Edward L. Keith, (Hurricanes of 1992: Lessons Learned and Implications for the Fu-ture, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p313-329.

Prototype Object-Oriented System for Maintenance of Timber Trusses, S. H. C. Foo and G. Akhras, CP July 94,

Soil Nailing Saves Distressed Timber Wall, James Harmston and Gary W. Rhodes, (Serviceability of Earth Re-taining Structures, Richard J. Finno, ed., 1994), p130-136

Special Considerations in the Design of Connections for Recycled Wood/Plastic Composite Lumber, George H. Kyanka, (Structures Congress XII, N. C. Baker, ed. and

Barry J. Loodno, ed., 1994), p929-933.

Timber Structures, Daniel F. Tully, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p97-102.

US Hurricanes of 1992 an Australian Perspective, Greg Reardon and Doug Meecham, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p642-651.

Use of Composite Timber-concrete Floors in Residential Buildings, B. H. Ahmadi and M. P. Saka, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p508-513.

Timbers

Creep Behavior of Structural Timber under Varying Humidity Conditions, Annika Martensson, ST Sept. 94, p2565-2582. Nondestructive Evaluation of Wood, Robert J. Ross and Roy F. Pellerin, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1233-1241.

Time dependence

Computation of Turbulent Shear Flow Over Surface-Mounted Obstacle, Jianming He and Charles C. S. Song, EM Nov. 92, p2282-2297.

Creep Effects in Composite Beams with Flexible Shear Connectors, Angelo Marcello Tarantino and Luigino Dezi, ST Aug. 92, p2063-2081.

Creep in Composite Continuous Beams. II: Parametric Study, Luigino Dezi and Angelo Marcello Tarantino, ST July 93, p2112-2133.

Estimation of the Thickness of Transition Zone in Concrete and Characteristics of Transition Zone in High-Strength Concrete, Hiroshi Uchikawa, Shunsuke Hanehara and Daisuke Sawaki, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p616.

Generalized Creep and Stress Relaxation Model for Clays, Ronaldo I. Borja, GT Nov. 92, p1765-1786.

Reexamination of Convex Polyhedron Outcrossing Problem, Ove Ditlevsen, EM Mar. 94, p654-660.

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Reliability of Underground Pipelines Subject to Corrosion, M. Ahammed and R. E. Melchers, TE Nov./Dec. 94, p989-1002.

Simplified Creep Analysis of Composite Beams with Flexible Connectors, Luigino Dezi, Carlo Ianni and Angelo Marcello Tarantino, ST May 93, p1484-1497.

Space-Time Variability of Sediment Suspension in the Nearshore Zone, A. E. Hay and A. J. Bowen, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p962-975.

The Time Dependent Ray Method for Calculation of Wave Transformation on Water of Varying Depth and Current, Yung Y. Chao, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p671-679.

Time-Dependent Behavior of RC Members Strengthened With FRP Laminates, Nikolaos Plevris and Thanasis C. Triantafillou, ST Mar. 94, p1016-1042.

Time-Dependent Load-Distribution Behavior of Parallel-Member Wood Systems, P. Hong, K. J. Fridley and D. V. Rosowsky, (*Structures Congress XII*, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1088-1093.

Digital Signal Processing Techniques for Active Structural Control, B. F. Spencer, Jr., P. Quast, S. J. Dyke and M. K. Sain, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p327-336.

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Sediment Concentration below Free Overfall, O. R. Stein and P. Y. Julien, HY Sept. 94, p1043-1059.

Stability Analysis of Optimal Active Control Systems with Time-Delay and Other Influence Parameters, Franklin Y. Cheng and Peter Tian. (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p286-295.

Stability of Active-Tendon Structural Control with Time Delay, L. Zhang, C. Y. Yang, M. J. Chajes and A. H-D. Cheng, EM May 93, p1017-1024.

Time-related Deflections of Cantilever Bridges, Cornelis van der Veen, Marcel van Vliet and Ane de Boer, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p922-929.

Time-Space Tradeoff Strategies for Space-Schedule Construction, Pierrette P. Zouein and Iris D. Tommelein, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1180-1187.

The Use of SCADA for Real-time Calculation and Monitoring for CT Compliance at the Ralph D. Bollman Water Treatment Plant, Peter Schoemann and Peter Martin, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2112-2123.

Time series analysis

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Extensive Comparison of Directional Wave Analysis Methods From Gauge Array Data, Michel Benoit, (Ocean Wave Measurement and Analysis, Orville Magoon, ed. and J. Michael Hemsley, ed., 1994), p740-754.

Long Term Predictability of River Stages under ENSO Influence, Juan B. Valdés, Dara Entekhabi and Paolo Bartolini, (Hydraulic Engineering '94, George Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p366-370

A Method for Locating Spikes in a Measured Time Series, James P. McKinney, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p388-393.

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Time-Series Modeling for Long-Range Stream-Flow Fore-casting, Michael Bender and Slobodan Simonovic, WR Nov./Dec. 94, p857-870.

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From King of the Road to 'Six Feet Under', CE Sept. 94,

Fundamental Properties of Asphalt Rubber Blends, William H. Daly, Louay N. Mohammad, Ioan Negulescu, Harold R. Paul and Jeffrey Youngblood, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p425-431.

Tire Chips Used as Pothole Preventers, CE Dec. 94, p19.

Use of Recycled Tire Rubbers in Concrete, Timothy D. Biel and Hosin Lee, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p351-

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Utilization of Waste Materials in Highway Construction, Serji Amirkhanian and David Manugian, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p919-927.

Damage Tolerance Analysis in Structural Rehabilitation, Charles J. Hookham, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p94-103.

Settlement of Tanks on Clay, J. Michael Duncan, Timothy B. D'Orazio and Phil Myers, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p92-106.

Tolerable Deformations, Harvey E. Wahls, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1611-1628.

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Modelling of Flood Wave Propagation Over Flat Dry
Areas of Complex Topography in Presence of Different Infrastructures, P. Molinaro, A. Di Filippo and F. Ferrari, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p209-228.

Numerical Simulation of Site Effects, Apostolos S. Papageorgiou, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p567-572.

Numerical Simulations of the CCS under the Joint Effects of Coastal Geometry and Surface Forcing, Yuhe Song and Dale Haidvogel, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p216-234.

Small Scale Dynamic Structures and Their Sedimentation Effects in Estuarine Environment, Chaoyu Wu and Jiaxue Wu, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994),

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Stake No More?, ET Dec. 94/Jan. 95, p11.

Stresses in Anisotropic Rock Mass with Irregular Topography, Ernian Pan and Bernard Amadei, EM Jan. 94, p97-

Theoretical study of unstable waves in the rapids of the river, H. Kyotoh, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1265-1269.

The Transport of Gravels in Boulder-Bed Streams, Alan F. Barta, Peter R. Wilcock and Conor C. C. Shea, (Hydrau lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p780-784.

Two-Dimensional Modelling of Flow in the River Sava, Rudi Rajar and Matjaž Četina, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p309-323.

Using GIS Technology to Assess Hurricane Damage, C. S. Papacostas, Wayne M. Hamaguchi, Harold S. Hamada and John Jaquess, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p607-616.

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Reducing the Risks of Severe Windstorm Disaster; an International Perspective, Alan G. Davenport, (Hurricanes of 1992: Lessons Learned and Implications for the Fu-ture, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p147-157.

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Microcomputer-Aided Analysis and Design of Spandrel Concrete Beams Subjected to Combined Bending and Torsional Loads, Nadar Ghafoori and Jeffrey Bucholc, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1711-1718.

Nonlinear Inelastic Analysis of Steel Beam-Columns I: Theory, Yong Lin Pi and N. S. Trahair, ST July 94, p2041-2061.

Nonlinear Inelastic Analysis of Steel Beam-Columns II: Applications, Yong Lin Pi and N. S. Trahair, ST July 94, p2062-2085.

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Response Study of a Flexible Building Using Three Earthquake Records, M. Çelebi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1220-

Torsion of Regular Multicellular Members, Donald L. Dean, ST Dec. 94, p3675-3678.

Torsional Response of Unsymmetric Buildings to Incoherent Ground Motions, G. D. Hahn and X. Liu, ST Apr. 94, p1158-1181.

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Tourism

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Two Case Studies of Marine Parks & Marinas as Economic and Tourism Activity Stimulators in Brazil, Claudio Brasil do Amaral and John C. Corrough, (), p565-576.

The Waterfront Development Process, Jeffrey A. Bartoszek and Ronald E. Schults, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p93-103.

Cables Over the Mississippi, Ernst H. Petzold, CE Feb. 94,

Collapse Load Calculated by Probability Based Analysis Compared to Full Scale Tower Test Results, Thien T. Do, Michael D. Miller, Leon Kempner, Jr., Troy D. Lyver and Wendelin H. Mueller, III., (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p48-59.

Design and Analysis of the 712 Fifth Avenue Structure, Louis A. Occhicone and Stanley Wojnowski, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p1556-1561.
First Bank Place: A Composite Cruciform Spine, P. V. Banavalkar, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p134-139.

GLG Grand, Atlanta Design and Construction, Martin R. Ocon, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p25-30.

Lateral Load Resisting Systems for Circular Buildings, Robert J. McNamara and Brent R. Goldstein, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p636-641.

Messeturm Tower: Frankfurt, Germany, Irwin G. Cantor and Ahmad Rahimian, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1550-1555.

One Peachtree Center: Atlanta Georgia, Housh Rahimza-deh and M. Nasim Akhtar, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p164-

Practical Application of Tuned Liquid Damper for Tall Buildings, Toshihiro Wakahara, Kenji Shimada and Yukio Tamura, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p851-856.

Settlement Analysis for 450 Meter Tall KLCC Towers, Clyde N. Baker, Jr., Ir. Tarique Azam and Len S. Joseph, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1650-1671.

The Slender Tower of 52-54 East End Avenue, Ahmad Rahimian, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1562-1567.

Transient Response of Guyed Telecommunication Towers Subjected to Cable Ice-Shedding, Ghyslaine McClure and Na Lin, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p801-809.

LDV System for Towing Tank Applications, R. N. Parthasarathy and F. Stern, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p386-395.

Velocity and Turbulence Measurement from the Illinois and Mississippi Rivers, Ta Wei Soong and Nani G. Bhowmik, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p62-75.

Toxic waste disposal

Modeling Initial Mixing of Ocean Wastewater Discharges to Develop Toxic Effluent Limitations, Christopher C. Obropta and Scott T. Taylor, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1047-1054.

Surprises Uncovered at Jet-Crash Sites, CE Mar. 94, p24.

Toxic wastes

Bug-Based Process Ready to Take Toxics Out of Incinera-tor Ash and Soil, ET Aug./Sept. 94, p1,6.

Environmental Uses of Cement in Waste Conditioning, F. P. Glasser, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994). p499-507.

An Experiment in Mobile Robotic Cooperation, Lynne E. Parker, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p131-

Molten Metal Bath Cleans Up Toxics, CE Jan. 94, p21-22. Where is the Pendulum Now? Do We Really Know? D. R.

Wheeler, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p155-167.

Toxicity Reduction, A. Renard, T. Maldague, S. Pilate, J. Journet, M. Rome, A. Harislur and J. Vergnes, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1682-1690

Assessing Stormwater Impacts, G. Allen Burton, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1198-1202.

Determining Plutonium Concentration in Solution Using a Germanium Crystal and a New L X-Ray/p-Ray Spectro-graphic Method, Raymond C. Gatti, Heino Nitsche, Scott A. Carpenter, Kevin E. Roberts, Becraft Kevin A. and Traudel G. Prussin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2719-2729.

Effect of Acid Orange 7 on Nitrification Process, Yongjie He and Paul L. Bishop, EE Jan./Feb. 94, p108-121

Estimating Toxicity of Organic Chemicals to Activated-Sludge Microorganisms, B. Sun, N. Nirmalakhandan, E. Hall, X. H. Wang, J. Prakash and R. Maynes, EE Nov./ Dec. 94, p1459-1469.

Innovative Treatment of Soil Contamination: Radiolytic Destruction of Dioxin and Co-Contaminants by Cobalt-60, Roger J. Hilarides and Kimberly A. Gray, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p733-736

Recent Assessment and Decontamination Studies of Contaminated Sediments in the New York/New Jersey Har-bor, Eric Stern, Joseph Olha, Audrey A. Massa and Bryce Wisemiller, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p458-467.

Where is the Pendulum Now? Do We Really Know? D. R. Wheeler, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p155-167.

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How Should the Migration and Retardation of Colloids be Characterized? Peter Grindrod, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2709-2718.

Magnetic Tracing of Beach Sand: Preliminary Results, Kuno D. van der Post, Frank Oldfield and George Voulgaris, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p323-

Monitoring of a dredging operation using innovative sediment tracing techniques, Jonathan Marsh, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1360-1369.

Stochastic Modeling of Spatial Heterogeneities Condi-tioned to Hydraulic and Tracer Tests, Akhil Datta Gupta, D. W. Vasco, J. C. S. Long and Stratis Vomvoris, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2624-2632.

Tracking

Assessing Effects for Disposal Sites off San Francisco, Peter Hamilton and Allan Y. Ota, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p14-28.

Estimation of Dispersion Coefficients from Particle Tracks, David A. Chin, EE Jan./Feb. 94, p256-263.

Real-time Motion Vision for Robot Control in Unstruc-tured Environments, John Woodfill, Ramin Zabih and Oussama Khatib, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p10-18.

Tracking and Steering Systems in Trenchless Construction, R. Tanwani and D. T. Iseley, CO Mar. 94, p65-76. The Tracking of High Level Waste Shipments—Transcom System, P. E. Johnson, D. S. Joy, R. B. Pope, T. M. Thomas and P. B. Lester, (High Level Radioactive Waste Management, High, Layel Padioactive Waste Department, June 19 Padioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1242-1248.

Traffic

Densification of Asphalt Pavements by Traffic, Charles R. Foster, (Airport Pavement Innovations—Theory to Practice, Jim W. Hall, Jr., ed., 1993), p164-180.

Dynamic Pavement-Strain Histories from Moving Traffic Load, Zia Zafir, Raj Siddharthan and Peter E. Sebaaly, TE Sept./Oct. 94, p821-842.

Integrating Computer Applications for Traffic Data Analysis, Patricia B. Noyes and Pete d'Oronzio, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1339-1342.

Rehabbing Bridges Under Traffic, Rita Robison, CE Apr.

94, p44-47.

Stochastic Vehicle-Queue-Load Model for Large Bridges, Ove Ditlevsen and Henrik O. Madsen, EM Sept. 94, p1829-1847.

Traffic Loads on Large Bridges Modeled as White-Noise

Fields, Ove Ditlevsen, EM Apr. 94, p681-694.

Traffic Safety Research: Database Issues and Analysis Techniques, Yusuf M. Mohamedshah and Charles C. Liu, (Computing in Civil Engineering, Khozeimeh, ed., 1994), p1846-1853.

Transport Infrastructure Choices for Industrial Cis-lunar Traffic, John Sved, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p587-596.

Using Interactive Simulation to Explore Drivers' Response to Visual Information Systems, Jeffrey L. Adler, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1735-1742.

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Which, Cd., 1997, p.121.

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heakout session 69. FVIA: Anathani A-Deek and Mi-chael Meyer, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p162-163. Emission Impacts of Intelligent Vehicle Highway Systems, Simon Washington, Randall Guensler and Daniel Sper-

ling, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p118-138.

Ending Gridlock on Ending Gridlock?, CE Nov. 94, p24. GIS Modeling of Neo-Traditional Neighborhood Development, John R. Stone, Thomas H. Wittmann and Jonathan L. Boone, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1131-1138.

Implications of ISTEA and CAAA '90 for Transportation Planning Data Needs, Christopher Fleet and Charles Goodman, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p76-94.

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mo Bekhor, TE Sept./Oct. 94, p843-859.

Metamodeling Approach for Approximating the Operating Characteristics of Series of G/G/I Queues on Congested Waterways, Melody, D. M. Dai and Paul Schonfeld, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p490-497.

Yearly Variation of Directional Distribution of Highway Traffic, Satish C. Sharma, TE May/June 93, p478-484.

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Arionas Faisis and Veda Delinier, *Journals, Tradinas, and Recreation Developments*, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p321-332.

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Evaluating ATIS impacts on Air Quality, H. Al-Deek, R. Wayson and A. E. Radwan, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p95-

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p10,12.

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A Computerized Methodology for Conducting Pedestrian Gap Studies, John Tipaldo, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2066-2072. Performance of Traffic Signals and Signs in Hurricane Andrew, Frances K. Ashley, Ronald A. Cook and Marc I. Hoit, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p415-423.

Traffic signs

A Feature Based Path Planning System for Robotic Stenciling of Roadway Markings, H. Kochekali and B. Ravani, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p52-60.

Setz, ed. and rau R. Rafer, ed., 1994), p52-60.
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Solani, ed., 1994), p.336-306.
Performance of Traffic Signals and Signs in Hurricane Andrew, Frances K. Ashley, Ronald A. Cook and Marc I. Hoit, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p415-423.

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laboration Between Minority and Majority Institutions, Neil S. Grigg, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p81-84. Engineers and Managerial Challenges: A Transitional Per-

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- Training for Effective Public Outreach: A Model for Transportation Risk Communication Training, Judith Holm, Kathie Reed and Dick Tardif, (High Level Radioactive Worte Press.) Waste Management, High Level Radioactive Waste Program Committee, 1994), p83-87.
- Using Knowledge Based Systems for Training the Young Engineer, James Crum and Michael Mulvihill, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1286-1293.
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- Ultrasonic Rock Fracture Characterization, G. Danko, G. Zhan, Cs. Mezei, J. Daemen and P. Mousset-Jones, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2789-2796
- Understanding Discrete Fracture Growth in Rock by Interpreting Acoustic Emissions, Steven D. Glaser, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p70-85.
- Use of An Analog Site Near Raymond, California, To Develop Equipment and Methods for Characterizing a Potential High-Level, Nuclear Waste Repository Site at Yucca Mountain, Nevada, Amjad M. J. Umari, Arthur Geldon, Gary Patterson, James Gemmell, John Earle and Jon Darnell, (High Level Radioactive Waste Manage-ment, High Level Radioactive Waste Program Committee, 1994), p2413-2422.
- The Use of Piezoelectric Film in Cavitation Research, Saurav Paul, Christopher R. Ellis and Roger E. A. Arndt, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p454-471.
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Transfer facilities

- Confirmation of MRS/MPC Transfer Facility Sizing Using Simulation Modeling, E. Scott Houston and Jennifer D. Hadley, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1387-1392.
- Transfer of Spent Nuclear Fuel Into Multi-Purpose Canister Storage, Roger G. Wagstaff, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p444-451.
- Transfer Vehicle Sizing for Missions to Mars, James P. Masciarelli, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1355-1364.

Transfer functions

- 53 WAK Tests on Spread Footings, James C. Maxwell and Jean-Louis Briaud, (Vertical and Horizontal Deforma-tions of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p143-152.
- Second Order Irregular-Wave Generation in Flumes -Computation of Transfer Functions by an Asymptotic Summation Method, Hemming A. Schäffer, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p784-797
- The Swept Sine Wave Testing Technique in Hydrodynam-ic Applications, Nicholas Haritos, Okey Nwogu and Andrew M. Cornett, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p533-546.

Transformations

- Observations Related to the Use of the Sigma Coordinate Transformation for Estuarine and Coastal Modeling Studies, John F. Paul, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p336-350.
- Practical Solution of the Flexibility to Stiffness Transformation Problem With a Mathematical Assistant for the Personal Computer, Thomas A. Lenox and Ronald W. Welch, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1465-1472.

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Transient loads

The Effect of Live Load on Downdrag Forces, Samuel A. Leifer, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p949-961.

Transient response Unsaturated Flow Experiment with Phase Change—The Heat Pipe Effect, A. Izzeldin, E. Hanson and R. Boehm, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2475-2480.

- Graphical-Based Productivity Transient Investigation
 Using DISCO, Rong-Yau Huang and Jorge A. Vanegas,
 (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1-8.
- Inverse Transient Analysis in Pipe Networks, James A. Liggett and Li-Chung Chen, HY Aug. 94, p934-955.
- Numerical Comparison of Pipe-Column-Separation Models, Angus R. Simpson and Anton Bergant, HY Mar. 94, p361-377.

- Transition points
 Design of Open-Channel-Contraction Transitions, Prabhata K. Swamee and Bharat C. Basak, IR May/June 94, p660-668.
- High-Order Bending of Sandwich Beams with Transversely Flexible Core and Nonparallel Skins, D. Peled and Y. Frostig, EM June 94, p1255-1269.
- No-Choke Flow in Trapezoidal Channels, Subhasish Dey, EM Oct. 94, p2224-2231.

Transmission lines

- ASCE GUIDE for Design of Guyed Transmission Structures, Alain H. Peyrot, (Structures Congress XII, N. C Baker, ed. and Barry J. Loodno, ed., 1994), p613-617.
- Assessment and Upgrade of an Older Transmission Line, Robert O. Kluge and Alain H. Peyrot, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p607-612.

Buckling Strength of Wood Power Poles Using Finite Elements, A. B. Peabody and J. W. Wekezer, ST June 94,

p1893-1908.

Hurricane Andrew Induced Damage to Florida Power & Light's Transmission System, C. Jerry Wong, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p387-396.

Investigating the Behavior of a Lattice Structural Section, L. Shan and M. Hanson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p725-730.

Role of Vortex-Excited Vibrations in Damage to Power Poles in Hurricane Andrew, Richard A. Skop and Ahmad H. Namini, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p567-576.

ASCE GUIDE for Design of Guyed Transmission Structures, Alain H. Peyrot, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p613-617.

Assessment and Upgrade of an Older Transmission Line, Robert O. Kluge and Alain H. Peyrot, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p607-612.

How Tall Transmission Poles Survived Hurricane Andrew, Kou-Roung Chang, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p377-386.

Test Experience with Heavy Angle Dead End Lattice Transmission Towers, J. M. Ferguson, D. D. Cannon and R. E. Nickerson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p601-606.

Transpiration

Partitioning of Evapotranspiration Using Lysimeter and Micro Bowen-Ratio Systems, Hossein Ashktorab, W. O. Pruitt and K. T. Paw U, IR Mar./Apr. 94, p450-464.

A-Tough: A Multimedia Fluid-Flow/Energy-Transport Model for Fully-Coupled Atmospheric-Subsurface Interactions, Parviz Montazer, Dale Hammermeister and Joseph Ginanni, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Commit-tee, 1994), p2333-2340.

Adaptive Numerical Methods for Transport Dominated Processes, Alfio Quarteroni, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and

Luigi Natale, ed., 1994), p114-126.

Agroforestry Drainage Management Model. III: Field Salt Flow, F. F. Karajeh and K. K. Tanji, IR Mar./Apr. 94, p397-413.

Alternative Formulation of Laterally Averaged Hydrody-namics, John Eric Edinger, Edward M. Buchak and Zhenyu Zhang, HY July 94, p886-890.

Analyzing Larval Fish Distributions Using Hydrodynamic and Transport Modelling, John Eric Edinger, Edward M. Buchak and Michael D. McGurk, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p536-550.

Application of WQMAP to Upper Narragansett Bay, Rhode Island, J. C. Swanson and D. L. Mendelsohn, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p656-678.

Benzene Transport Through Landfill Liners Containing Organophilic Pentonite, James A. Smith and Peter R. Jaffé, EE Nov./Dec. 94, p1559-1577.

Bromide Transport under Sprinkler and Ponded Irrigation, M. Hamdi, D. Durnford and J. Loftis, IR Nov./Dec. 94, p1086-1097.

Buoyant Advection of Gases in Unsaturated Soil, Gregory E. Seely, Ronald W. Falta and James R. Hunt, EE Sept./ Oct. 94, p1230-1247.

Characterization of Circulation and Salinity Change in Galveston Bay, Keh-Han Wang, EM Mar. 94, p557-579. Chloride Diffusivity Computation for Cement Paste, E. J. Garboczi and D. P. Bentz, (Cement Manufacture and

Use, Paul W. Brown, ed., 1994), p159-173.

Comparison of Eulerian-Lagrangian, Random Walk and Hybrid Methods of Modeling Pollutant Transport, Jeffrey C. Moeller and E. Eric Adams, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p609-623.

Contaminant Fate and Transport Model in Pool-and-Riffle Streams, Il Won Seo, Dae Young Yu and Jae-Hyung Lee, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p165-169.

Critical Concepts for Column Testing, Charles D. Shackel-

ford, GT Oct. 94, p1804-1828.

Detailed Characterization and Preliminary Adsorption Model for Materials for an Intermediate-Scale Reactive-Transport Experiment, David B. Ward, Charles R. Bryan and Malcolm D. Siegel, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2048-2062.

DETMOD: A Desktop Estuarine Transport MODel, David G. Kleinschmidt and Bryan R. Pearce, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p1032-1038.

Development and Feasibility of a Waste Package Coupled Reactive Transport Model (AREST-CT), David W. Engel, B. Pete McGrail, James A. Fort and Janet S. Roberts, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1214-1221.

Development of Transport Model for Groundwater Planning and Management in Taipei Basin, Nien-Sheng Hsu, Ming-Jame Horng, Chian Min Wu, William W-G. Yeh and Jan-Tai Kuo, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

p332-335.

Effects of Flocculation on Particle Transport, Wilbert Lick, C. Kirk Ziegler, James Lick and Aruna Joshi, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p172-186.

Estimation of Field Site Flow Parameters, Yahia Majali, Salwa Rashad, John Hoopes and Tswn-Syau Tsay, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p303-307.

Fate/Transport Modeling and Remediation of Contaminated Plume at Vance Airforce Base, Avdhesh K. Tyagi and Sharon H. Carpenter, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p287-292.

Flow and Chloride Transport in the Tidal Hudson River, NY, Lawrence A. Weiss, Raymond W. Schaffranek and M. Peter de Vries, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

p1300-1305.

Geostatistics for Fracture Characterization, R. Mohan Srivastava and Bruce M. Davis, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p2131-2138.

The Impact of Buoyant, Gas-Phase Flow and Heterogenei-ty on Thermo-Hydrological Behavior at Yucca Mountain, Thomas A. Buscheck and John J. Nitao, (High Level Radioactive Waste Management, High Level Ra-dioactive Waste Program Committee, 1994), p2450-2474.

Improving Subsurface Characterization and Prediction of Contaminant Transport, Salwa Rashad and Craig H. Benson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p277-

An Integrated Shell (ROSS3) for Transport Modeling, Visualization, and Data Management, Keerthisiri S. Angammana, Poojitha D. Yapa and Hung Tao Shen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R.

Rumer, ed., 1994), p150-154.

Linking Hydrodynamic and Biogeochemical Transport Models for Estuarine and Coastal Waters, J. M. Hamrick, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p591Modeling Heavy Metal (Cadmium) Uptake by Soil-Plant Root System, Sandhya Rao and Shashi Mathur, IR Jan./

Feb. 94, p89-96. Modeling Hydrologic and Pollutant Transport Processes for Stromwater Runoff to Surface Waters, Leslie L. Shoemaker, Mohammed Lahlou, Andrew Stoddard and James Pagenkopf, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1208-1212.

Modeling Pollutant Fate and Transport in Constructed Wetlands, Russell T. Brown, Joanne Field, Michael J. Zanoli and Ron W. Crites, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p532-539.

Monitoring and Modeling the Transport of Coarse Single Particles in Mountain Rivers, Peter Ergenzinger and Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p634.

Movement of Colloids Under Hydraulic Gradients, Rao S. Govindaraju and Lakshmi N. Reddi, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p322-326.

A Multi-Dimensional Transport Model Utilizing a Characteristic-Galerkin Approach, John F. DeGeorge and Ian P. King, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p407-421

Near Field Behavior of a Far Field Circulation Model, Xueyong Zhang, Eric Adams, Alan Blumberg, Z. G. Ji and Kirk Ziegler, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

p155-159.
A Nearshore Model for Cleveland CSO Remediation Design Selection, David P. Podber, Chieh-Cheng J. Yen, Lou Regenmorter, Keith W. Bedford and Onyx W. H. Wai, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p222-226.

Nowcast System Development for the Straits of Florida,

Christopher N. K. Mooers and Dong-Shan Ko, (Estua-

Christopher N. K. Mooers and Dong-Shan Ko, (Estua-rine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p158-171.
Numerical Modeling of Advective and Diffusive Transport in the Rappahannock Estuary, Virginia, Kyeong Park and Albert Y. Kuo, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed. 1994) 4661-474. ed., 1994), p461-474.

ed., 1994), p401-4-4.

Pheumatic Conveying of Materials at Partial Gravity,
Thomas A. Sullivan, Elissa Koenig, Christian W. Knudsen and Michael A. Gibson, AS Apr. 94, p199-208.

Predictability and Sensitivity of Groundwater Transport
Models, Hector R. Fuentes and Vassilios A. Tsihrintzis,

Models, Hector K. Fuentes and Vassilios A. Isinfinizis, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p267-271.
Radiogenic Heavy Minerals as Tools in Selective Coastal Transport, R. J. de Meijer, I. C. Tánezos and C. Stapel, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p306-

322

Radionuclides Migration in Fractured Porous Rock: Analytical Solutions for Various Boundary Conditions, Shih-Hai Li and Shean-Lang Chiou, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p1344-1349.

Reconstruction of Concentration Boundary Condition for Unsteady Pesticide Transport Modeling, Deborah J. Mossman and Nael Al Mulki, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p160-164. SEASHELL - Software for the Simulation of Transport and Fate of Pollutants in Coastal Waters, Venkat S. Kolluru and Malcolm L. Spaulding, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p624-640.

Selenite Transport in Unsaturated Tuff From Yucca Mountain, James L. Conca and Ines R. Triay, (High Level Ra-dioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2175-2182.

Simulated Circulation and Transport in Adjacent Wind-Driven Estuaries in North Carolina, Jeanne C. Robbins and Jerad D. Bales, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p105-118.

Subsurface Transport Modeling of the Savannah River and Yucca Mountain Sites, Bryan E. Dunlap, Darrell W. Pepper and Dale E. Stephenson, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p1848-1853.

Transport Process of Surface Liquid Spills, Hsien-Ter Chou, (*Hydraulic Engineering* '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p145-149.

Tributary Loading with a Terrain Following Coordinate System, David P. Podber and Keith W. Bedford, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p475-488.

A Two-Dimensional Contaminant Transport Model with High-Resolution Upwind Schemes, Dihua Zhao, Jihn-Sung Lai and Hsieh Wen Shen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p135-139.

Transport rate

Bed-Load Sampling in Sand-Bed Rivers, Moustafa T. K. Gaweesh and Leo C. van Rijn, HY Dec. 94, p1364-

Data Analysis of Bed Concentration of Suspended Sediment, Julio A. Zyserman and Jørgen Fredsøe, HY Sept. 94, p1021-1042

The Delta Flume'93 Experiment, A. S.-Arcilla, J. A. Roelvink, B. A. O'Connor, A. Reniers and J. A. Jiménez, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p488-

Sediment Transport Under Wave-Current Interaction on Macro-Tidal Beaches, Franck Levoy, Olivier Monfort and Hélène Rousset, (*Coastal Dynamics* '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p727-741.

Space-Time Variability of Sediment Suspension in the Nearshore Zone, A. E. Hay and A. J. Bowen, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p962-975.

Turbulent Structure of Water and Clay Suspensions with Bed Load, Zhaoyin Wang and Peter Larsen, HY May 94, p577-600.

Transportation

Best Route GIS System, Siripong Malasri and L. Yu Lin, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1123-1130.

Burnup Verification Using the Fork Measurement System, Ronald I. Ewing, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p732-738.

Certification of a Spent Fuel Cask for Storage and Transportation, Meg Lusardi, Robert M. Bernero and Charles H. Haughney, (High Level Radioactive Waste Manage-ment, High Level Radioactive Waste Program Committee, 1994), p1168-1173.

Companies Offer Perks to Cut Commuter Trips, ME July/ Aug. 94, p10-11.

Confirmation of MRS/MPC Transfer Facility Sizing Using Simulation Modeling, E. Scott Houston and Jennifer D. Hadley, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1387-1392.

Coping with EPA's Transportation Storm Water Permit, James P. Amick, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1219-

Cultivating Stakeholder Interaction in Emergency Manage-ment, Wallace J. Weaver and Loretta F. Brownell, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p188-192.

Decision Aids for Enhancing Intergovernmental Interactions: The Prenotification Analysis Support System (PASS), Marcus Lester, Edward Liebow and Judith Holm, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p168-175.

The Development of a Packaging Handbook, L. B. Shappert, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1237-1241.

Dry Storage and Transportation of Failed Fuel, Robert D. Quinn and Brandon D. Thomas, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p949-954. Effects of Axial Burnup Distributions on the Reactivity of

Spent Fuel, Theodore A. Parish, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p744-751. Fabrication Options for Depleted Uran ium Components in Shielded Containers, Susan B. Derrington, James E. Shielded Containers, Susan B. Deringon, James Thompson and Cameron W. Coates, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p942-948.

The First Multipurpose Spent Fuel Container Reviewed by the U.S. Nuclear Regulatory Commission (USNRC), Ivan F. Stuart, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Commit-

tee, 1994), p467-476.

A Framework for a Database of Construction Costs and Productivity at the Process Level for Transportation Infrastructure Development, Antonio A. González-Quevedo, (Computing in Civil Engineering, Khalil

Christian (Company) in Criti Engineering, Khaaii Khozeimeh, ed., 1994), p1854-1858. Hills, Charles R. Vojislav Banjac and A. Sharif Heger, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p671-678.

Human Factors Engineering Applications in the Testing of the Legal Weight Truck Cask Transportation System, Thomas C. Smith, Millard Peck, III and Robert A. Sealock, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p375-380.

Impacts of Repository Thermal Loading on System Cost, L. D. Rickertsen and W. W. Matyskiela, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p586-591. Interfaces Between Transport and Geologic Disposal Sys-

tems for High-Level Radioactive Wastes and Spent Nuclear Fuel—A New International Guidance Document, R. B. Pope, K. W. Han, T. Pollog, L. Baekelandt, D. Blackman, J.-M. Hoorelbeke and J. E. Villagran, (*High* Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1229-1236.

Monitored Retrievable Storage/Multi-Purpose Canister Analysis: Simulation and Economics of Automation, Phil C. Bennett and Joe B. Stringer, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p363-369. A Numerical Study of Convection Heat Transfer Within

Enclosed Horizontal Rod-Bundles, M. Keyhani and L. Luo, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p780-787.

An Overview of the Accident Response Mobile Manipula-tion System (ARMMS), W. D. Morse, D. R. Hayward, D. P. Jones and A. Sanchez, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer,

ed., 1994), p304-310.

Population Estimation Techniques for Routing Analysis, Shashi K. Sathisan and Anil K. Chagari, (High Level Ra-dioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p658-665.

Raising Students' and Educators' Awareness of Radioactive Materials Transport Through Creative Classroom Materials and Exhibits, Judith Holm, Cheryl Sandoz, Jennifer Dickenson, Anne Marie Smith and Jan Cortelyou Lee, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p213-216.

Role of the Dual Purpose (Storage and Transport) Metal ole of the Duar Purpose (Storage and Transport) Product Cask In the Spanish Strategy for Temporary Storage of Spent Fuel, José Gago and José M. Grávalos, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1174-1178

Shielding Analysis for the Conceptual Design of the MPC Transportation Cask, Kelvin J. Montague, James R. Thornton, Jr. and Robert G. Eble, Jr., (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p918-922

Stakeholder Involvement in the Evaluation of a Multipurpose Canister System, Susan Smith, Pete Bolton and Tim Dantoin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p314-1-314-6.

693

The Tracking of High Level Waste Shipments—Transcom System, P. E. Johnson, D. S. Joy, R. B. Pope, T. M. Thomas and P. B. Lester, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1242-1248.

Traffic Safety Research: Database Issues and Analysis Techniques, Yusuf M. Mohamedshah and Charles C. Liu, (Computing in Civil Engineering, Khalil

Khozeimeh, ed., 1994), p1846-1853.

Training for Effective Public Outreach: A Model for Transportation Risk Communication Training, Judith Holm, Kathie Reed and Dick Tardif, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p83-87.

Transfer Vehicle Sizing for Missions to Mars, James P. Masciarelli, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley

Lokaj, ed., 1994), p1355-1364.

Transport Infrastructure Choices for Industrial Cis-lunar Traffic, John Sved, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p587-596.

Transportation engineering

Applying a Problem-Solving and Consensus Building Ap-proach to Transportation Infrastructure and Environ-mental Protection, Eugene W. Cleckley, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p226-228

DOT Unveils Proposed National Highway System, CE Feb. 94, p98.

Making the Switch to Metrication Easier, CC Apr. 94, p5. Poland Gets Moving, Jeff Austin, WP Special issue 94,

Start-ups, CE Jan. 94, p8.

Transportation Capstone Design Project: Review and Future Directions, John G. Schoon, El Jan. 94, p70-89.

Transportation management

Breakout Session 1: Coping with Conformity, Lucy Ed-mundson, Sonia Hamel, Abbe Marner and Michael Re-plogle, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p139.

Breakout Session 2C: Market-Based Incentives, Kiran Bhatt, Donna Boyson, Sonia Hamel and Clarisse Lula, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p145-146.

Evaluating Ride-Sharing Programs: Massachusetts' Experience, John Collura, UP Mar. 94, p28-47.

Evaluating the Effects of Transportation Control Measures, William R. Loudon and Deborah A. Dagang, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p19-43.

The Role of Transportation Control Measures in Reducing Air Pollution: MPO Views, Andrew J. Reser, David T. Hartgen and Walter E. Martin, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p44-

State DOTs Tackle Problem Projects, CE Mar. 94, p18-19. TRB Meeting Focuses on Istea Implementation, CE Mar. 94, p20,22

Transportation networks

Civil Engineers Urge Congress to Fund National Highway System, NE Apr. 94, p2.

Demand/Supply Relationship in Transportation Network Design Problems: A Genetic Algorithm Approach, Yihua Xiong and Jerry B. Schneider, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p938-

Interactive Design of Service Routes, Jin-Yuan Wang and Jeff R. Wright, TE Nov./Dec. 94, p897-913.

Transportation planning

Applying a Problem-Solving and Consensus Building Approach to Transportation Infrastructure and Environmental Protection, Eugene W. Cleckley, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p226-228.

Breakout Session 1: Coping with Conformity, Lucy Ed-mundson, Sonia Hamel, Abbe Marner and Michael Replogle, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p139.

Breakout Session 2A: TCM Requirements - General, Daniel Beagan, Elizabeth Deakin, Christine Kirby and Joseph Pulaski, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p140-141.

Breakout Session 2B: Transportation SIP Requirements, Mark Howard, Craig Leiner, Phil Lorang and John Suhrbier, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p142-144.

Breakout Session 3A: Interfacing with Emission Models, Greig Harvey, Ron Kirby, Keith Lawton, Michael Replogle and Leonard Seitz, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p147-150.

Breakout Session 4B: Speed and Vehicle Mix, Arun Chatterjee, Lawrence Tittemore and Roy Turner, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p153.

Breakout Session 4C: Public Participation, Brian Ketchum, Marilyn Skolnick and Kathleen Stein Hudson, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p154.

Breakout Session 5B: Microscale Modeling, Paul Benson, Don DiCristofaro, Richard Schoeneberg and John Zamurs, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p156-157.

Breakout Session 6A: Mass Transportation, Matthew Coo-gan, Lansingh Freeman and Victoria Rankin Marks, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p161.

Breakout Session 6B: IVHS, Haitham Al-Deek and Michael Meyer, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p162-163.

Conformity and the New Transportation Covenant, James M. Shrouds, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p1-18. Do Endangered Species Endanger Projects?, CE June 94,

p12,14.

DOT Unveils Proposed National Highway System, CE Feb.

94, p98. Evaluating the Effects of Transportation Control Measures, William R. Loudon and Deborah A. Dagang, (Transportation Planning and Air Quality II, Thomas F. Wholly,

ed., 1994), p19-43.

Evaluation Framework for IVHS, Hong K. Lo, Arun Chatterjee, Frederick Wegmann, Stephen Richards and Ajay K. Rathi, TE May/June 94, p447-460.

High Level Radioactive Waste Management, 4 vols., High Level Radioactive Waste Program Committee, (Thomas L. Sanders, chmn.), 1994, 0-7844-0022-9, 3005pp.

Implications of ISTEA and CAAA '90 for Transportation Planning Data Needs, Christopher Fleet and Charles Goodman, (Transportation Planning and Air Quality II. Thomas F. Wholly, ed., 1994), p76-94.

ISTEA Enhances Transportation, Douglas L. Tober, CE Oct. 94, p64-66.

The Key is Constructability, William J. Schmitz and Theo-dore von Rosenvinge, IV, CE Aug. 94, p54-56. Louisiana Plan Would Link Air, Land and Sea Travel, CE

Jan. 94, p25. MPOS Become VIPS, John Prendergast, CE Apr. 94, p40The Nevada Statewide Radioactive Materials Transportation Plan, Maria Ardila-Coulson, (High Level Radi tive Waste Management, High Level Radioactive Waste Program Committee, 1994), p150-157. Planes, Trains and the Games, John Prendergast, CE Aug.

94, p38-41.

Predicting TCM Responses with Urban Travel - Demand Models, Peter R. Stopher, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p59-75.

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The Role of Transportation Control Measures in Reducing Air Pollution: MPO Views, Andrew J. Reser, David T. Hartgen and Walter E. Martin, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p44-

Structuring Category Analysis Using Statistical Technique, V. R. Rengaraju and M. Satyakumar, TE Nov./Dec. 94,

Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994, 0-87262-914-7, 237pp.

TRB Meeting Focuses on Istea Implementation, CE Mar. 94, p20,22.

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Louisiana Plan Would Link Air, Land and Sea Travel, CE Jan. 94, p25.

Overview of Hurricane Andrew in South Florida, Ronald A. Cook, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p70-83.

Pavement Treatment in Ohio Transportation System, Sakchai Prechaverakul, Fabian C. Hadipriono, Roger L. Green, Richard D. Boyle and John A. Ray, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

Prioritizing Transit Markets Using Analytic Hierarchy Process, Snehamay Khasnabis and Bharat B. Chaudhry, TE Jan./Feb. 94, p74-93.

The Structuring of a New Architectural Landscape, Karen Van Lengen, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p956.

Washington State DOT Picks Privatization Projects, CE Nov. 94, p11.

Transverse loads

Dynamic Response of Fibre-Reinforced Composite Plates Under Distributed Impact Loads, R. K. Mittal and M. R. Khalili, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p94-109.

On the Snow-Plough Effect when Cutting Water Saturated Sand with Inclined Straight Blades, S. A. Miedema, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p865-

Tests on Deep I-Shape Pultruded Beams, A. Zureick and L. F. Kahn, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1572-1577.

Transverse shear

Influence of Membrane Forces on Transverse-Shear Reinforcement Design, Perry Adebar and Weishi He, ST Apr. 94, p1347-1366.

Large Deformation Theory Using Truncated Rotations, Daniel A. Miller and Anthony N. Palazotto, (Engineering, Construction, and Operations in Space IV, Rodney Galloway, ed. and Stanley Lokaj, ed., 1994), p137-146.

Trap efficiency

A Better Description of Trap Efficiency for Fine Sediment in Horizontal Settling Basins, Shaohua Marko Hsu and Wei-Sheng Yu, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1186-1192.

Vortex-Tube Sediment Extractors. Part I: Trapping Efficiency, Edmund Atkinson, HY Oct. 94, p1110-1125.

Trapezoidal channels

General Formulation of Best Hydraulic Channel Section, Parviz Monadjemi, IR Jan./Feb. 94, p27-35.

No-Choke Flow in Trapezoidal Channels, Subhasish Dey, EM Oct. 94, p2224-2231.

Hydro Plant Research Data Acquisition System, James E. Donegan, Julia Crittenden Tarbell and John F. Doyle, Chernegan, Julia Criterineri I arbert and John F. Doyle, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p477-481.

Safety Grates in Supercritical Channels, Julia E. Allred-Coonrod, IR Jan. Feb. 94, p218-224.

Systems-Level Evaluation of Automated Urban Freeways, Robert A. Johnston and Raju Ceerla, TE Nov./Dec. 94, p877-896.

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Predicting TCM Responses with Urban Travel - Demand Models, Peter R. Stopher, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p59-75.

Systems-Level Evaluation of Automated Urban Freeways, Robert A. Johnston and Raju Ceerla, TE Nov./Dec. 94, p877-896.

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Characteristics of Trips by Foot and Bicycle Modes in Indian City, V. Thamizh Arasan, V. R. Rengaraju and K. V. Krishna Rao, TE Mar/Apr. 94, p283-294.

Evaluating Ride-Sharing Programs: Massachusetts' Experience, John Collura, UP Mar. 94, p28-47.

Inter-stellar Propulsion: The Need for Speed, William R. Claycomb, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p737-746.

Redesigning Suburbia for Walking and Transit: Emerging Concepts, Farhad Atash, UP Mar. 94, p48-57.

Travel patterns

ASCE President Leads Visit to South American Countries, NE July 94, p16.

Breakout Session 2C: Market-Based Incentives, Kiran Bhatt, Donna Boyson, Sonia Hamel and Clarisse Lula, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p145-146.

Breakout Session 3A: Interfacing with Emission Models, Greig Harvey, Ron Kirby, Keith Lawton, Michael Replogle and Leonard Seitz, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p147-150.

Breakout Session 4A: VMT Estimation, Julian Benjamin, Charles Crevo and Samual Lawton, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed.,

1994), p152.

Design of a Network and Travel Simulator: A Tool Box for the Analysis of Route Choice Behavior in the Presence of Information, Kenneth M. Vaughn, Prasuna Reddy, Ryuichi Kitamura, Paul P. Jovanis and Mohamed A. Ab del-Aty, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1743-1750.

Analysis of Potential Highway Routes to Yucca Mountain, Shashi K. Sathisan, Emelinda M. Parentela and Michael S. Lee, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1278-1285.

Best Route GIS System, Siripong Malasri and L. Yu Lin, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p1123-1130.

Calibration of a Highway Traffic Assignment Model for the Manhattan Central Business District, V. Papayannoulis, J. C. Falcocchio and L. Maynus, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p720-

Data Fusion for an ATIS Operational Test: Description and Computational Issues, Nagui M. Rouphail and Peter Nel-son, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1532-1535.

Demand/Supply Relationship in Transportation Network Design Problems: A Genetic Algorithm Approach, Yihua Xiong and Jerry B. Schneider, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p938-941

Rail Service to Airports, Peter B. Mandle, (Aviation Crossroads: Challenges in a Changing World, William

J. Sproule, ed., 1994), p140-149.

Switzerland: Rail Access to Airports and the Fly-Luggage System, Eugene H. Jud, (Aviation Crossroads: Chal-lenges in a Changing World, William J. Sproule, ed., 1994), p159-161.

Agroforestry Drainage Management Model: I: Theory and Validation, F. F. Karajeh, K. K. Tanji and I. P. King, IR Mar./Apr. 94, p363-381.

Agroforestry Drainage Management Model: II: Field Water Flow, F. F. Karajeh and K. K. Tanji, IR Mar./Apr. 94, p382-396.

Effect of Saline Irrigation Water on Tree Growth, Ghulam Hussain and Otto J. Helweg, IR Sept./Oct. 94, p970-978.

Evapotranspiration by Young Florida Flatwoods Citrus Trees, Brian J. Boman, IR Jan./Feb. 94, p80-88.

Tree Root Induced Settlement of a Large Industrial Building Founded on Expansive Clay-A Case History, Aziz Aboaziza and Hisham H. H. Mahmoud, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1472-1481.

Trenches

Modeling of Infiltration from Trenches for Storm-Water Control, Michael Duchene, Edward A. McBean and Neil R. Thomson, WR May/June 94, p276-293.

Advances in Chemical Admixtures for Concrete, Mario Collepardi, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994),

Analysis and Computation, Franklin Y. Cheng, ed., 1994, 0-87262-974-0, 398рр.

Application of Structural Optimization, M. Z. Cohn and A. S. Dinovitzer, ST Feb. 94, p617-650.

Constructed Civil Infrastructure Systems R&D: A European Perspective, CERF report #94-5010, Civil Engineering Research Foundation, 1994, 0-7844-0001-6, 145pp.

Current and Future Research in Steel Bridge Structures, Karl H. Frank, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1077-1081.

Current Trends in Waterpark Development, Terry R. Barnhart, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p434-438.

Future Trends and Needs in Hydraulics, Daryl B. Simons, HY Dec. 92, p1607-1620.

Packaging Benefits Packages, Michael W. Creed, Christie C. Allen and C. Janet Whitney, ME Jan/Feb. 94, p19-22. Spotting Trends in Design and Construction, ME Nov J Dec. 94, p13.

Triangulation

Mesh Generation for Estuarine Flow Modeling, Norman L. Jones and David R. Richards, WW Nov./Dec. 92, p599-

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Fracture Energy Formulation for Inelastic Behavior of Plain Concrete, G. Etse and K. Willam, EM Sept. 94, p1983-2011.

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Hyperbolic Stress-Strain Parameters for Silts, Timothy D. tark, Robert M. Ebeling and Joseph J. Vettel, GT Feb. 94, p420-441.

Laboratory and Field Leaching Tests on Coastal Salt-Bearing Soils, Nabil F. Ismael, GT Mar. 93, p453-470.

Bearing Soils, Nabil F. Ismael, GT Mar. 93, 9435-470. Liquefaction of Artificially Filled Silty Sands, Susumu Yasuda, Kazue Wakamatsu and Hideo Nagase, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p91-104. Resilient Modulus for Fine-Grained Subgrade Soils, Dingqing Li and Errest T. Selig, GT June 94, p939-957. Stress-Path Dependent Shear Strength of Sand, J. Feda, GT June 94, p938-974.

June 94, p958-974.

Energy Losses in Steep Tributary Streams at Flows Near The Threshold of Bedload Entrainment, Matthew D. O'Connor, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p778-

Tributary Loading with a Terrain Following Coordinate System, David P. Podber and Keith W. Bedford, (Estuaed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p475-488.

Trichloroethylene

Destruction of Gas Phase TCE Using a Plasma Reactor, Ho-Sik Yoo, John N. Veenstra, Ven-Yen Tsai and Arland H. Johannes, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p585-592.

Dissolution of TCE and TCA Pools in Saturated Subsurface Systems, Albert E. Pearce, Evangelos A. Voudrias and Michael P. Whelan, EE Sept./Oct. 94, p1191-1206.

An Evaluation of the Impact of Recent Flooding on the Operation of a Groundwater Extraction and Treatment System at a Superfund Site, Kerry L. Gavett, Michael J. Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p764-771.

How Can a Radioactive Waste Disposal Facility Achieve Compliance with RCRA? Ruth F. Weiner, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1525-1531.

Model for Treatment of Trichloroethylene by Methanotrophic Biofilms, James E. Anderson and Perry L. McCarty, EE Mar./Apr. 94, p379-400.

Rehabbing for Remediation, David Banton and Robert Anderson, CE Mar. 94, p64-65.

Treatment of Tetrachloroethylene with Anaerobic Attached Film Process, K. H. Chu and W. J. Jewell, EE Jan./Feb. 94, p58-71.

Vapor Adsorption of Trichloroethylene on Quartz Sands of Varying Grain Size, David K. Kreamer, Karol J. Oja, S. Steinberg and Hugh Phillips, EE Mar./Apr. 94,

Green-Ampt Analysis of Wetting Patterns for Surface Emitters, Shu-Tung Chu, IR Mar./Apr. 94, p414-421.

Computer Aided Design of Trickling Filters, Bruce E. Logan, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p678-685.

Nitrification in Single-Stage Trickling Filters, Rao Y. Surampalli, O. Karl Scheible and Shankha K. Banerji, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p694-

Oxygen Utilization of Trickling Filter Biofilms, Steven W. Hinton and H. David Stensel, EE Sept./Oct. 94, p1284-1297.

Trihalomethanes

Anaerobic Biodegradation of Chloroform under Methanogenic Conditions, Devesh, Munish Gupta, Makram T. Suidan and Gregory D. Sayles, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p609-616.

Bromine Distribution Factors in THM Formation, Paul H. Hutton and Francis I. Chung, WR Jan./Feb. 94, p1-16.

Control of Disinfection By-Products in Drinking Water, Philip C. Singer, EE July/Aug. 94, p727-744.

Correlating Trihalomethane Data, Paul H. Hutton and Francis I. Chung, EE Jan/Feb. 94, p219-241.

DBP Control in Drinking Water: Cost and Performance, Robert M. Clark, Jeffrey Q. Adams and Benjamin W. Lykins, Jr., EE July/Aug. 94, p759-782.

Trihalomethanes in Chlorinated Sacramento-San Joaquin Delta Drinking Water Simulated with the EPA WTP-THM Model, Russ T. Brown, Doug Brewer, Doug Owen and Zaid Chowdhury, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p492-500.

Trip distribution models

Breakout Session 3A: Interfacing with Emission Models, Greig Harvey, Ron Kirby, Keith Lawton, Michael Replogle and Leonard Seitz, (*Transportation Planning and Air Quality II*, Thomas F. Wholly, ed., 1994), p147-150.

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Characteristics of Trips by Foot and Bicycle Modes in In-dian City, V. Thamizh Arasan, V. R. Rengaraju and K. V. Krishna Rao, TE Mar./Apr. 94, p283-294.

Predicting TCM Responses with Urban Travel - Demand Models, Peter R. Stopher, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p59-75.

Structuring Category Analysis Using Statistical Technique, V. R. Rengaraju and M. Satyakumar, TE Nov./Dec. 94,

Trip frequencies

Breakout Session 3A: Interfacing with Emission Models, Greig Harvey, Ron Kirby, Keith Lawton, Michael Re-plogle and Leonard Seitz, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p147-150.

Breakout Session 4A: VMT Estimation, Julian Benjamin, Charles Crevo and Samual Lawton, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p152.

Tropical cyclones

Instrumented Buoy Network Response to Ocean Swell, Theodore Mettlach and David Gilhousen, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p28-44. Some Lessons from Australian Experience, George R.

Walker, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p249-258.

Tropical soils

Design, Construction and Performance of a Soil Nailed Wall in Puerto Rico, Suang S. Cheng and Lawrence A. Hansen, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p1-16.

Evapotranspiration by Young Florida Flatwoods Citrus Trees, Brian J. Boman, IR Jan./Feb. 94, p80-88.

Truck specifications

Computing Truck Attributes with Artificial Neural Networks, N. Gagarin, I. Flood and P. Albrecht, CP Apr. 94, p179-200.

Accurate and Rapid Determination of Fatigue Damage in Steel Bridges, C. Hahin, J. M. South, J. Mohammadi and R. K. Polepeddi, ST Jan. 93, p150-168.

Alternative Approach to Estimation of Critical Cornering Speed, John D. Leonard, II, TE May/June 94, p478-496.

Behavior of Two-Span Continuous Bridge Under Truck Axle Loading, Jane L. Tiedeman, Pedro Albrecht and Lloyd R. Cayes, ST Apr. 93, p1234-1250.

Bubba, A Teleoperated Countermine Vehicle, Dave Hayward, Bryan Pletta, Jerry Clifford and Kerry Habiger, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p464-473.

Computing Truck Attributes with Artificial Neural Networks, N. Gagarin, I. Flood and P. Albrecht, CP Apr. 94,

Cumulative Impact of Heavy Permit-Trucks on Steel Bridges, Michel Bruneau and Murat Dicleli, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p97-102.

Development of Bridge Live Load Models, John M. Kulicki, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p532-537.

Dynamic Loading of a Rigid Frame Bridge, Dongzhou Huang, Ton-Lo Wang and Mohsen Shahawy, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p85-90.

Dynamic Model for Analysis of Concrete Pavements, Karim Chatti, John Lysmer and Carl L. Monismith, (Structures Congress XII, N. C. Baker, ed. and Barry J. Lood-

no, ed., 1994), p984-989.

Dynamic Simulation of Tractor-Trailer-Cask System Used in Nuclear Waste Transportation, Zekai Ceylan and Cahit Evrensel, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p934-941.

Fabrication and Testing of High Strength, High Capacity, Weight Optimized Trailers, Chad Taylor, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p931-933.

- Human Factors Engineering Applications in the Testing of the Legal Weight Truck Cask Transportation System, Thomas C. Smith, Millard Peck, III and Robert A. Sealock, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p375-380.
- Overweight Trucks and Safety of Bridges, Gongkang Fu and Osman Hag-Elsafi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p284-289.
- Simple Live Load Distribution Factors for Girder Bridges, Sami W. Tabsh, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p497-502.
- Statistical Evaluation of Truck Overloads, Jamshid Mohammadi and Nadir Shah, TE Sept./Oct. 92, p651-665

Automatic Truss Design by Optimized Growth, William Keith Rule, ST Oct. 94, p3063-3070.

The Behaviour and Design of Stressed-Arch (Strarch) Frames, Murray J. Clarke and Gregory J. Hancock, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p200-209.

Buckling Behavior of Square-and-Diagonal Double-Layer Grid, Toshitsugu Saka and Yoshiya Taniguchi, ST Apr. 94, p1088-1102.

- 54, pruose-1102.
 Collapse Behavior of Double-Layer Space Truss Grids with Member Buckling, Toshitsugu Saka and Yoshiya Taniguchi, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p529-538.
- Columnless in Chicago, Daniel A. Cuoco, Udom Hungspruke and Robert P. DeScenza, CE Nov. 94, p42-
- Common Causes of Collapse of Metal-Plate-Connected Wood Roof Trusses, Harvey A. Kagan, CF Nov. 93, p225-234.
- Compression-Member Models for Space Trusses: Review, Erling Murtha-Smith, ST Aug. 94, p2399-2407.
- Damage Prediction in Reinforced Concrete Structures under Cyclic Loading, B. Garstka, W. B. Krätzig and F. Stangenberg, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p280-289.

Design and Construction of the Cable-Stayed Wooden Space Truss Roof, Kei Sadakata and Hong Wan, (Spa-tial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994),

p810-819

Design of Half-Through or "Pony" Truss Bridges Using Square or Rectangular Hollow Structural Sections, Steven J. Herth, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p210-220.

Dynamic Characteristics of Translational Lattice Domes, Celina U. Penalba, (Spatial, Lattice and Tension Struc-tures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p269-279.

Dynamic Effects of Progressive Member Failure on the Response of Truss Structures, Ramesh B. Malla, Baihai Wang and Butchi B. Nalluri, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p60-76.

Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993, 0-87262-946-5,

Effects of Spatial Triangulation on the Behavior of "Tensegrity" Domes, David M. Campbell, David Chen, Paul A. Gossen and Kris P. Hamilton, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard. ed. and Celina U. Penalba, ed., 1994), p652-663.

Erectable Truss Hardware for Large Space Structures, Ray-mond E. Dick, Terry N. Faddis and Bill G. Barr, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p414-422.

Evolutionary Methods for Synthesis of Truss Topology, Fang Zhao, Sushil J. Louis and Mihaly Lenart, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1816-1823

Genetic Algorithms in Discrete Optimization of Steel Truss Roofs, Vlasis K. Koumousis and Panos G. Georgiou, CP

July 94, p309-325.

- The Georgia Dome and Beyond: Achieving Lightweight -Longspan Structures, Matthys P. Levy, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p560-
- Innovations in Major Suspension Bridge Design, Klaus H. Ostenfeld, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p772-778.
- Large Deformation Analysis of Lattice Truss Structures In-cluding Hysteretic Material Behavior, Nayla Khattar, George E. Blandford and Shien T. Wang, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p499-
- Load Duration Effects in an 85-Year-Old Timber Structure, J. B. Mitchell, K. J. Fridley, M. O. Hunt and J. F. Senft, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p73-78.
- A Membrane Structure for a Lunar Assembly Building, Mark E. Schroeder and Philip J. Richter, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p186-195.
- Metal Truss Plates: Less than Full-Depth Penetration and Shear Buckling, Keith F. Faherty, Gerri L. Peot nee Kocher and Matthew J. Mazza, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p695-700.
- Modeling to Generate Alternatives in Discrete Structural Optimization, John W. Baugh, Jr., E. Downey Brill, Jr. and Shannon C. Caldwell, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p310-317.
- A Near-Term, Long-Duration, Lunar Outpost Design, S. Sture, S. D. Jolly and J. Happel, (Engineering, Construc-tion, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p237-246.
- On the Shoulders of Giants, Francis E. Griggs, Jr., El July 94, p254-264.
- Optimization of Space Lattice Structures with Multimodal Frequency Constraints, J. Czyz and S. Lukasiewicz, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p419-429.

Optimization of Space Trusses on Vector Multiprocessor, H. Adeli and H. -L. Hsu, AS Jan. 94, p120-126.

Performance of Metal-Plate-Connected Wood Truss Roof Systems During Hurricane Andrew, Ramon M. Riba, Michael H. Triche and Charles Hoover, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994),

Phoenix Central Library: Reading Room Roof, Michael W. Ishler, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba,

ed., 1994), p38-46.

Reliability of Uncertain Nonlinear Trusses Under Random Excitation. II, R.-H. Cherng and Y. K. Wen, EM Apr. 94, p748-757.

Reliability of Uncertain Nonlinear Trusses Under Random Excitation. I, R.-H. Cherng and Y. K. Wen, EM Apr. 94,

Response of Truss Structures Subjected to Dynamic Loads During Member Failure, Ramesh B. Malla and Butchi, B. Nalluri, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p249-258.

Seismic Behavior of Open-Web Truss-Moment Frames, Subhash C. Goel and Ahmad M. Itani, ST June 94,

p1763-1780.

Seismic Study of Historic Bridges in Eastern United States, Constantine C. Spyrakos, Emory L. Kemp and Ramesh Venkatareddy, Structures Congress XII. N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p380-386.

Seismic-Resistant Special Truss-Moment Frames, Subhash C. Goel and Ahmad M. Itani, ST June 94, p1781-1797.

Space Frame Solution for the Design of Large Pyramid Structures, T. J. DeGanyar, M. D. Griffin and M. R. Patterson, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p47-56.

St. Louis Complex's Hefty Crown, CE Nov. 94, p14.

Structural Integrity of Space Trusses, Erling Murtha-Smith, Anurag Chaturvedi and Shawn F. Leary, (Spatial, Lat-tice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p409-418

Welded Joints for Robotic On-Orbit Assembly of Space Structures, William K. Rule and Frank P. Thomas, AS Apr. 94, p209-224.

Tsunamis

Opening Remarks by Robert L. Wiegel, Robert L. Wiegel, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p194-

"Deepwater Waves and Tsunami Produced by the Impacts of Small Asteroids", J. G. Hills, (Engineering, Construc-tion, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1365-1371.

Corrosion Fatigue of Stiffened Offshore Steel Tubular Joints, D. S. Ramachandra Murthy, A. G. Madhava Rao and A. R. Santhakumar, ST July 94, p1991-2010.

Hot Spot Stresses of Tubular Joints Subjected to Combined Loadings, Ai-Kah Soh and Chee-Kiong Soh, ST Feb. 93, p654-661.

Analysis of Unstiffened and Stiffened Tubular Members Under External Pressure and Structural Loads, Spyros A. Karamanos and John L. Tassoulas, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1520-1525.

Axisymmetric Vibrations of Thick-Walled Cylindrical Tubes in the Presence of Thermal Residual Stresses, Victor Birman, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p257-265.

Inelastic Response of Metal Matrix Composite Tubes, Robert S. Salzar and Furman W. Barton, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p266-275.

Moment-Curvature Relationships for Dented Tubular Sections, L. Duan, J. T. Loh and W. F. Chen, ST Mar. 93, p809-830.

Negative Shear Lag in Framed-Tube Buildings, Y. Singh and A. K. Nagpal, ST Nov. 94, p3105-3121.

New Kinematic Hardening Model, Wei Jiang, EM Oct. 94, p2201-2222.

Steady-State Analysis of Buckle Propagation, André Nogueira and John L. Tassoulas, (Structures Congress XII, N. C. Baker, ed. and Barry I. London Congress XIII, . C. Baker, ed. and Barry J. Loodno, ed., 1994), p1514-1519.

Study of Two-Surface Plasticity Theory, Wei Jiang, EM Oct. 94, p2179-2200.

Ultimate Resistance of Unstiffened Multiplanar Tubular TT- and KK-Joints, Joop C. Paul, Yuji Makino and Yoshiaki Kurobane, ST Oct. 94, p2853-2870.

Vortex-Tube Sediment Extractors. Part I: Trapping Efficiency, Edmund Atkinson, HY Oct. 94, p1110-1125. Vortex-Tube Sediment Extractors. Part II: Design, Edmund Atkinson, HY Oct. 94, p1126-1138.

Tuned liquid dampers

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Practical Application of Tuned Liquid Damper for Tall Buildings, Toshihiro Wakahara, Kenji Shimada and Yukio Tamura, (Structure Scongress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p851-856.

Tuned mass dampers

Semianalytical Method for Parametric Study of Tuned Mass Dampers, Y. L. Xu and K. C. S. Kwok, ST Mar. 94, p747-764.

Tunnel construction

The Channel Tunnel: Larger Than Life, and Late, Virginia Fairweather, CE May 94, p42-46.

Cut and Cover Construction of the SSC Injector Tunnels, Mahendra P. Yajnik and Wayne Q. Hudler, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p749-754.

Depressing Traffic Top-Down, Dan Burroughs, Shyi-Shyong Jiang and Henrie Henson, CE Jan. 94, p62-64.

Environmental Monitoring and Mitigation: Harbor Tunnel Dredging and Disposal Operations, Boston, Massachusetts, Curtis A. Meininger and Alan D. Randall, (*Dredg*ing '94, E. Clark McNair, Jr., ed., 1994), p1471-1480.

Light at the End of the Chunnel, Virginia Fairweather, WP Special issue 94, p10-13.

Rating the Megaprojects, CE Jan. 94, p8. Report Near on Condition of L.A. Metro Tunnel, CE Jan. 94, p22.

Soil Mix Walls in Difficult Ground, David S. Yang and Shigeru Takeshima, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p106-120. Tunnelers Assess Markets and Machines, CE Aug. 94, p14.

Behavior of Pressure Tunnels and Guidelines for Liner Design, Gabriel Fernández, GT Oct. 94, p1768-1791

Computer Calculations Speed Tunnel-Lining Design, Gerhard Sauer, Vojtech Gall and Erich Bauer, CE June 94, p46-49.

An Overview of the Analysis and Design Techniques Used on the Main Tunnels of the SSC, Steven H. Baldauf, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1967-1974.

Prediction of Ground Deformations Due to Excavation-Application to Tunnel Lining Design in Weak Rock, Wern-ping Chen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1997-2005.

Rehabilitation of Brick-Lined Railroad Tunnels to Achieve Increased Clearance, Bernard H. Voor, III, James Wm. Martin and Willie Benton, III, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p781-787.

Report: Specs Not Met but Los Angeles Metro Tunnel 'Structurally Adequate', CE May 94, p24-25.
Three Dimensional Simulation of Progressive Tunneling

Process for Lining Design of Intersecting Tunnels in Soft Rock, Liqiu (Lichu) Guan, Steven H. Baldauf and Wern-Ping (Nick) Chen, (Computing in Civil Engineer-ing, Khalil Khozeimeh, ed., 1994), p2006-2013.

Application of Fuzzy Logic in Civil Engineering in Japan, Hitoshi Furuta, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1900-1907.

Development of a Mechanical Alcove Excavator for the Yucca Mountain Exploratory Study Facility, Erika Rönnkvist, James E. Friant and Levent Ozdemir, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p411-416.

Microtuneling Techniques to Form an Insitu Barrier Around Existing Structures, Philip J. Coller and David G. Abbott, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p386-394.

- Novel, Low-Vibration Excavation Techniques for Underground Radioactive Waste Storage, Wilhelm J. Kogelmann, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), 9417-429.
- Safety Issue Boosts Record Soft Ground Jet-Grouting Job, CE Oct. 94, p18-19.
- Three Dimensional Simulation of Progressive Tunneling Process for Lining Design of Intersecting Tunnels in Soft Rock, Liqiu (Lichu) Guan, Steven H. Baldauf and Wern-Ping (Nick) Chen, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2006-2013.
- Tracking and Steering Systems in Trenchless Construction, R. Tanwani and D. T. Iseley, CO Mar. 94, p65-76.
- Tunnel Boring Machine for Nuclear Waste Repository Research Project, Hans A. Janzon, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p403-410.
- A Tunnel Boring System for the Yucca Mountain Project, Steven N. Short, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p381-385.
- Tunnel School, Brian Brenner and Richard O'Brien, El Oct. 94, p405-412.

Tunnok

- Analysis of Flow Along Anisotropic Fractures in Partially Saturated Media, J. S. Y. Wang and B. L. Cox, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1915-1921
- Behavior of Pressure Tunnels and Guidelines for Liner Design, Gabriel Fernández, GT Oct. 94, p1768-1791.
- Brooklyn Battery Tunnel Rehab is Under Way, CE May 94, p28.
- The Challenge of Housing the Largest Detector, Prabir Das, C. J. Roth and Nachum Secker, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p755-760.
- Comparison of Coupled Thermal-Mechanical-Hydrological Analysis of a Fractured Rock Mass, M. P. Ahola, A. H. Chowdhury, S. M. Hsiung and J. Philip, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2492-2499.
- Construction Monitoring Activities in the ESF Starter Tunnel, John Pott and Scott Carlisle, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1993-1998.
- Construction of a Cofferdam Pressure Relief System, J. Taylor, W. L. Galbraith, G. Richters, J. E. Baka and C. C. Chang, *Serviceability of Earth Retaining Structures*, Richard J. Finno, ed., 1994), p93-111.
- Design for Tunnel-Type Sediment Excluder, U. C. Kothyari, P. K. Pande and A. K. Gahlot, IR Jan./Feb. 94, p36-47.
- Emergency Repairs for Storrow Drive Tunnel, Paul L. Kelley, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1103-1110.
- Hydraulics of Seawater Purging in Tunneled Wastewater Outfall, E. Eric Adams, Dipak Sahoo, Christopher R. Liro and Xueyong Zhang, HY Feb. 94, p209-226.
- Investigation of Faulted Tunnel Models by Combined Photoelasticity and Finite Element Analysis, Samaan G. Ladkany and Yuping Huang. (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1979-1986.
- An Overview of Shotcrete Usage on the SSC, Steven H. Baldauf, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p773-778.
- An Overview of the Analysis and Design Techniques Used on the Main Tunnels of the SSC, Steven H. Baldauf, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1967-1974.
- Practical Seepage Control in Existing Tunnels, J. Samuel Vance, Daniel J. Hurst and C. T. Goewey, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), 9888-895.

- Proposed Rehabilitation of Storrow Drive Interchange Tunnel, Frank J. Heger, Atis A. Liepins and Paul L. Kelley, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1111-1118.
- Public-Sector Project Politics Assailed, CE Aug. 94, p21. Reconstruction of the Dewey Square Tunnel, Brian Brenner, Dincer Akyali and Paul Moyer, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham,
- ed., 1994), p772-780.

 Rock Anchors Keep 'Boat' From Falling, CE Dec. 94, p11.

 Shallow Tunnels in Cohesionless Soil: Stability of Tunnel
 Face, Pierre Chambon and Jean-François Corté, GT July
 94, p1148-1165.
- Start-ups, CE Jan. 94, p8.
- Study of Stress Concentrations at the Intersection of Underground Chambers for the Superconducting Super Collider Project, Fwu-Ding (Kim) Lin, Lichu Guan and Steven Baldauf, (Computing in Civil Engineering, Khalil Khozeimeh, ed. 1994), p1975-1984.
- Three-Dimensional Dynamic Response of Twin Cavities due to Traveling Loads, F. Guan and I. D. Moore, EM Mar. 94, p637-651.
- Ultrasonic Rock Fracture Characterization, G. Danko, G. Zhan, Cs. Mezei, J. Daemen and P. Mousset-Jones, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2789-2796.
- Waterproofing a Structural Slab at Ground Anchor Locations, David L. Druss, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p77-92.

Turbidity

- Assessing Effects for Disposal Sites off San Francisco, Peter Hamilton and Allan Y. Ota, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p14–28.
- Depositional Turbidity Currents Laden with Poorly Sorted Sediment, Marcelo H. Garcia, HY Nov. 94, p1240-1263.
- Dynamics of Coagulation of Clay Particles with Aluminum Sulfate, Hsiao-Wei Ching, Menachem Elimelech and Janet G. Hering, EE Jan./Feb. 94, p169-189.
- The Formation of a Turbidity Maximum in an Estuary, Kathryn Pickens, Zenitha Chroneer, Poorvi Patel and Wilbert Lick, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p187-201.
- Turbidity and Contaminant Release During Dredging of Contaminated Sediments, Ronald W. van Oostrum and Peter Vroege, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p210-219.
- Verification of Numerical Modeling of the Fate of Disposed Dredged Material, Michelle M. Thevenot and Billy H. Johnson, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p180-189.
- Water-Treatment-System Design for Turbidity Removal. I: Simulation, H. B. Dharmappa, S. Vigneswaran, J. Verink and O. Fujiwara, EE July/Aug. 94, p900-920.
- Water-Treatment-System Design for Turbidity Removal. II: Optimization, H. B. Dharmappa, O. Fujiwara, J. Verink and S. Vigneswaran, EE July/Aug. 94, p921-942.

Turbine

- A Fish Bypass Screen at Puntledge Project, Herbert Louie, John Taylor and Larry J. Swenson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p442-446.
- Model-Prototype Conformance of a Submerged Vortex in the Intake of a Vertical Turbine Pump, K. Warren Frizell, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p482-489.
- Oxygen Transfer in Bubbly Turbulent Shear Flow, Kyung Soo Jun and Subhash C. Jain, HY Jan. 93, p21-36.
- Soo Jun and Subhash C. Jain, HY Jan. 93, p21-36.
 Parametric Evaluation of Cross-Flow Turbine Performance, V. R. Desai and N. M. Aziz, EY Apr. 94, p17-34.
- Refinement of Cross-Flow Turbine Design Parameters, Hara G. S. Totapally and Nadim M. Aziz, EY Dec. 94, p133-147.

Strain Measurement on the Runner of a Hydroelectric Tur-bine, K. Warren Frizell, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p416-424.

Testing Turbine Aeration for Dissolved Oxygen Enhancement, Tony L. Wahl, Jerry Miller and Doug Young, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p425-434.

Turbulence

CDR - A Chemical Solution to a Mechanical Problem, Gary E. Blizzard, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p172-

Coherent Structures in Compound Open-Channel Flows by Making Use of Particle-Tracking Visualization Tech-nique, Iehisa Nezu, Hiroji Nakagawa and Ken-ichi Saeki, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p406-415.

Experimental Study on Turbulent Structures in Unsteady Open-channel Flows, Iehisa Nezu, Akihiro Kadota and Hiroji Nakagawa, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford

A. Pugh, ed., 1994), p185-194.

Field Measurements of Secondary Currents in Straight Rivers, Iehisa Nezu, Akihiro Tominaga and Hiroji Naka-gawa, HY May 93, p598-614.

Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994, 0-7844-0036-9, 546pp.

The Great Lakes Forecasting System: An Overview, Keith W. Bedford and David J. Schwab, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p197-201.

High-speed Video Analysis of Sediment-Turbulence Inter-action, Yarko Niño, Fabián López and Marcelo García, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p213-222

Hot-Film Response in Three-Dimensional Highly Turbulent Flows, P. Prinos, (Fundamentals and Advancements Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p176-184.

Investigation of an Anisotropic k-& Model, Yun Zhang, Yongquan Yang and Chigong Wu, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Ru-

mer, ed., 1994), p1280-1284.

An Investigation of Turbulence in Open Channel Flow via Three-component Laser Doppler Anemometry, Mahalingam Balakrishnan and Clinton L. Dancey, (Fundamentals and Advancements in Hydraulic Measure-ments and Experimentation, Clifford A. Pugh, ed., 1994), p159-175.

LDV System for Towing Tank Applications, R. N. Parthasarathy and F. Stern, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p386-395

Luo, Ming, Weilin Xu and Huasheng Liao, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1009-1013.

Measurement of Turbulent Properties in a Natural System, Jörg Imberger and Roger Head, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p1-20.

Modified Eddy Viscosity Model in Fully Developed Asymmetric Channel Flows, Whey-Fone Tsai and Robert Ette-ma, EM Apr. 94, p720-732.

New Techniques for Experimental Studies for Dredged Material Dispersion, Philip J. W. Roberts, Adrian Ferrier and B. H. Johnson, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1192-1200.

Prediction of Accretion Below Muhuri Closure Dam in Bangladesh, Mohammad Monowar Hossain and Mohammad Shahabuddin, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1141-1145.

Response of Velocity and Turbulence to Abrupt Changes from Smooth to Rough Beds in Open-channel Flows, Iehisa Nezu and Akihiro Tominaga, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p195-204.

Sediment Suspension Events and Shear Instabilities in the Bottom Boundary Layer, D. L. Foster, R. A. Holman and R. A. Beach, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p712-726.

700

Self-Aerated Flows on Chutes and Spillways, H. Chanson, HY Feb. 93, p220-243. Short Circuiting and Density Interface in Primary Clarifiers, Siping Zhou, J. A. McCorquodale and A. M. Godo, HY Sept. 94, p1060-1080.

Simulation of Flow in Circular Clarifiers with and without

Swirl, László Szalai, Peter Krebs and Wolfgang Rodi,

HY Jan. 94, p4-21. Simulation of Round Buoyant Jet in Stratified Flowing Environment, G. A. Bemporad, HY May 94, p529-543

Structure of River Turbulence Behind Warm Water Discharge, Vladimir I. Nikora, Paweł Rowiński, Aleksander Suchodolov and Dariusz Krasuski, HY Feb. 94, p191-

Surface Pressures on the Roof of the Texas Tech Experimental Building: Model and Full-Scale, Henry W. Tieleman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1445-1450.

Synthetic Wind for Investigations in Time-Domain, Imre Kovacs, (Structures Congress XII, N. C. Baker, ed. and

Barry J. Loodno, ed., 1994), p900-905.

Turbulence Measurements in Open-Channel Flows over Artificial Bed Forms, D. A. Lyn, HY Mar. 93, p306-326. Turbulent Structure of Water and Clay Suspensions with

Bed Load, Zhaoyin Wang and Peter Larsen, HY May 94, p577-600.

Velocity and Turbulence Measurement from the Illinois and Mississippi Rivers, Ta Wei Soong and Nani G. Bhowmik, Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p62-75.

Velocity Measurements in Asymmetric Turbulent Channel Flows, R. N. Parthasarathy and M. Muste, HY Sept. 94,

Wind Loads on Roofs of Low Rise Structures: Buffeting or Interaction, Henry W. Tieleman, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994),

Turbulent boundary layers

Generalized Inner Region Velocity Distribution Equation, Prabhata K. Swamee, HY May 93, p651-656.

Turbulent Boundary Layer Over Flat Plate with Rigid and Flexible Surfaces, M. S. Abu Sharekh, S. K. Pathak, G. L. Asawa and P. D. Porey, EM Aug. 94, p1675-1695.

Turbulent diffusion

DREDGMAP: A PC Based System to Predict the Fate of Dredged Material, J. Craig Swanson, Malcolm L. Spaulding and Tatsusaburo Isaji, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p200-209.

Air Concentration Measurements in Highly-Turbulent Flow on a Steeply-Sloping Chute, James F. Ruff and Kathleen H. Frizell, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p999-1003.

Anomalous Measurements in a Compound Duct, David G. Rhodes and Donald W. Knight, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p311-320.

Characteristics of Supercritical Flow below Sluice Gate, Iwao Ohtsu and Youichi Yasuda, HY Mar. 94, p332-

Computation of Turbulent Shear Flow Over Surface-Mounted Obstacle, Jianming He and Charles C. S. Song, EM Nov. 92, p2282-2297.

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Experimental Study of Undertow and Turbulence Intensity Under Irregular Waves in the Surf Zone, Nels J. Sultan and Francis C. K. Ting, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p602-613.

Experimental Study on Turbulent Structures in Unsteady Open-channel Flows, Iehisa Nezu, Akihiro Kadota and Hiroji Nakagawa, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p185-194.

Hot-Film Response in Three-Dimensional Highly Turbulent Flows, P. Prinos, (Fundamentals and Advancements Hydraulic Measurements and Experimentation,

Clifford A. Pugh, ed., 1994), p176-184.

Hydrodynamic Behavior of Compound Rectangular Open Channels, Dan Naot, Jehisa Nezu and Hiroji Nakagawa,

HY Mar. 93, p390-408.

An Investigation of Turbulence in Open Channel Flow via Three-component Laser Doppler Anemometry Mahalingam Balakrishnan and Clinton L. Dancey, (Fun damentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p159-175.

MAC3D: Multiblock Numerical Model for Hydraulic Applications, Robert S. Bernard, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p507-511.

Measurement of Turbulent Properties in a Natural System, Jörg Imberger and Roger Head, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p1-20.

Momentum and Energy Coefficients Based on Power-Law Velocity Profile, Cheng-lung Chen, HY Nov. 92,

p1571-1584

Numerical Modelling and Laboratory Verification for the Turbulent Flow Field in the Branching Channel, Ke-Feng Li, Wen-Qian Zhao, Jia Li and Lin Luo, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1295-1299.

Simultaneous Flow Visualization and Hot-Film Measurements, Fabián López, Yarko Niño and Marcelo García, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed.,

1994), p490-499.

Turbulent Velocities in a Mountain River, Graeme M. Smart, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p844-

Velocity Distribution in Compound Channel Flows by Numerical Modeling, Giuseppe Pezzinga, HY Oct. 94, p1176-1198

Turnkey projects

Choosing Appropriate Construction Contracting Method, Christopher M. Gordon, CO Mar. 94, p196-210.

A Sea Turtle Deflecting Hopper Dredge Draghead, Michael P. Alexander and Glynn E. Banks, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p857-864.

Application of a Needle Probe in Measuring Local Parameters in Air-Water Flow, A. R. Zarrati and J. D. Hardwick, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p296-300.

Estimating Two-Phase Hydraulic Properties by Inverse Modeling, Stefan Finsterle and Karsten Pruess, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2160-

Experimental Design and Measurement Techniques for Investigation of Two-Phase Flow, Andreas J. Kuck, (Fun-damentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed.,

1994), p86-93.

Measuring Air Concentration in Flowing Air-Water Mix-tures, Boualem Hadjerioua, Tony A. Rizk, Emmett M. Laursen and Margaret S. Petersen, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p289-295.

Phenomenological Studies of Two-Phase Flow Processes for Nuclear Waste Isolation, Karsten Pruess, Stefan Finsterle, Peter Persoff and Curt Oldenburg, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2639-2647.

A Study of Two Phase Flow in Fracture Networks, Kenzi Karasaki, Stuart Segan, Karsten Pruess and Stratis Vom-voris, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p2633-2638.

Void Fraction Measurement Techniques for Gas-Liquid Bubbly Flows in Closed Conduits; A Literature Review, Mahmood Naghash, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p278-288.

Two-dimensional

2D Bar-Code Applications in Construction, Bob G. McCullouch and Kamolwan Lueprasert, CO Dec. 94, p739-752.

Computation of Turbulent Shear Flow Over Surface-Mounted Obstacle, Jianming He and Charles C. S. Song, EM Nov. 92, p2282-2297.

Physical-Based Numerical Model of Inclined Starting Plumes, Juichiro Akiyama, Masaru Ura and Wei Wang, HY Oct. 94, p1139-1158.

Two-dimensional analysis

Horizontal and Vertical Movements of Bridge Piers Subjected to Ship Impact, Naresh C. Samtani, Jaw-Nan Wang, Frank Pepe, Jr. and Michael J. Abrahams, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p245-256.

Reliability and Validity of Modeling Sedimentation and Debris Flow Hazards Over Initially Dry Areas, Douglas L. Hamilton, Robert C. MacArthur and Vito A. Vanoni, (Modelling of Fload Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), 220, 265

p342-356.

Two-dimensional flow

A 2D numerical simulation of the Po river delta flow, D. Ambrosi, S. Corti, V. Pennati and F. Saleri, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p18-29

An Adaptive Nine-Point Finite Volume Roe Scheme for Two-Dimensional Saint-Venant Equations, Fayssal Benkhaldoun and Luc Monthe, (Modelling of Flood Propa-gation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p30-44.

Bed-Level Variation in Channel Expansions with Movable Beds, P. K. Mohapatra and S. Murty Bhallamudi, IR Nov./Dec. 94, p1114-1121.

Computing Two Dimensional Flood Propagation with a High Resolution Extension of McCormack's Method, F Alcrudo and P. García Navarro, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p3-17.

A Control Volume Finite Element Method for the Solution of 2-D Overland Flow Problems, P. Di Giammarco and E. Todini, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale,

ed., 1994), p82-101.

Formation and Propagation of Steep Waves: An Investiga-tive Experimental Interpretation, P. G. Manciola, A. Mazzoni and F. Savi, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p283-297.

Non-Point-Source Pollution from Interrill Flow Areas, A. Parr, S. Limback, B. McEnroe and S. Zou, IR Nov./Dec.

94, p1056-1066.

Numerical Analysis of High Velocity Flow with Zero-Depth Line and Oblique Shock Wave in Steep Open-Channels, Takashi Hosoda and Nozomu Yoneyama, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1270-1274.

Two-Dimensional Dam-Break Flow Simulation in a Sudden Enlargement, M. Četina and R. Rajar, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p268-282.

Using GIS to Develop 2-D Hydraulic Models, Craig R. Wilkening, Lynn E. Johnson and Joel Herr, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p136-140.

Two-dimensional models

Analysis of Levee Design in a Mountain River Using Two-Dimensional Flow Modeling, Diane M. L. Mas, Andrew J. Miller, James A. Smith and Wei-hao Chung, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p757-761.

Application of the FESWMS-2DH Software to Solve the Navigation Problem at EL-Menya Bridge in Egypt, Khaled Kheireldin, Ahmed Fahmey and Mohamed Gas-ser, (Computing in Civil Engineering, Khalil

Knaled Kneiretoin, Anmed ranney and Monamed Gas-ser, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1244-1250. Calculation of 2D Flood Propagation Using the Program Package Floodsim, W. Bechteler, M. Nujic and A. J. Otto, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p257-267.

Combining a 2-D Flood Plain Model with GIS for Flood Delineation and Damage Assessment, P. Di Giammarco, E. Todini, David Consuegra, F. Joerin and F. Vitalini, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994),

p171-185.

Comparison of 2D and 3D Models for Computing Shallow Water Tides in a Friction-Dominated Tidal Embayment, R. R. Grenier, R. A. Luettich, Jr. and J. J. Westerink, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p58-70.

Composite 2D/3D Hydroelastic-Analysis Method for Floating Structures, Xiling Che, H. Ronald Riggs and R. Cengiz Ertekin, EM July 94, p1499-1520.

Computation of a flood event using a two dimensional finite element model and its comparison to field data, P. D. Bates, M. G. Anderson and J. -M. Hervouet, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p243-256.

Considerations in 2-D Modeling of Hydraulically Steep Flow, R. C. Berger and R. L. Stockstill, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1285-1289.

Elastic Constants for Z-Core Sandwich Panels, Tat-Ching Fung, Kang-Hai Tan and Tat-Seng Lok, ST Oct. 94, p3046-3055.

Extensions of Finite Element Dental Stress Analysis, Robert E. Efimba and E. M. Ahmed, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1928-1935.

Finite-Volume Two-Dimensional Unsteady-FLow Model for River Basins, D. H. Zhao, H. W. Shen, G. Q. Tabios, III, J. S. Lai and W. Y. Tan, HY July 94, p863-883.

Flow Past Two-Dimensional Lateral Slot, A. S. Ramamurthy, Weimin Zhu and B. L. Carballada, EE Nov./Dec. 94, p1632-1638.

Free surface flow modelling on a complex topography, Mohamed Naaim and Gerard Brugnot, (Modelling Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p298-308.

Geographical Information Systems and Remote Sensing: a cograpment information Systems and Remote Sensing: a possible support in 2D modelling of flood propagation, F. F. Amighetti, P. P. Congiatu, A. Di Filippo and P. Molinaro, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p143-155.

Hydrodynamic Modeling of San Diego Bay, Parmeshwar L. Shrestha, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p140-

Interdependence of Beach Fill Volumes and Repetition Intervals, Hans-H. Dette, Alfred Fuehrboeter and Arved J.

Raudkivi, WW Nov./Dec. 94, p580-593.

Liquid Infiltration Through the Boiling-Point Isotherm in a Desiccating Fractured Rock Matrix, O. M. Phillips, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2189-2196.

Modelling of Flood Wave Propagation Over Flat Dry Areas of Complex Topography in Presence of Different Infrastructures, P. Molinaro, A. Di Filippo and F. Ferrari, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994),

A New Set of Equations for Very Shallow Water and Par-tially Dry Areas Suitable to 2D Numerical Models, A. Defina, L. D'Alpaos and B. Matticchio, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p72-81.

One- and Two-Dimensional Analysis of Flow in Hotophia Creek, MS, Yafei Jia and Carlos V. Alonso, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p589-594.

Quasi-Two Dimensional Modelling of Flood Routing in Rivers and Flood Plains by Means of Storage Cells, E. Bladé, M. Gómez and J. Dolz, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p156-170.

A Real-Time Graphical Interface to a Two-Dimensional Groundwater Flow and Mass Transport Model, Robert C. Speake, Jr. and Kay S. Capps, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2081-

Seismic Hazard Analysis of Nonlinear Structures. I: Methodology, Paolo Bazzurro and C. Allin Cornell, ST Nov. 94, p3320-3344.

Storm and Entrainment Effects on Tributary Sediment Loads, Deborah H. Lee, Keith W. Bedford and Chieh-Cheng J. Yen, HY Jan. 94, p81-103.

A Two-Dimensional Contaminant Transport Model with High-Resolution Upwind Schemes, Dihua Zhao, Jihn-Sung Lai and Hsieh Wen Shen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p135-139.

Two-Dimensional Modelling of Flow in the River Sava, Rudi Rajar and Matjaž Četina, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p309-323.

Two-Dimensional Simulation of Basin Irrigation. I: Theory, E. Playán, W. R. Walker and G. P. Merkley, IR Sept./Oct. 94, p837-856.

Two-Dimensional Simulation of Basin Irrigation. II: Applications, E. Playán, W. R. Walker and G. P. Merkley, IR Sept./Oct. 94, p857-870.

Two-Dimensional Water Flood and Mudflow Simulation, J. S. O'Brien, P. Y. Julien and W. T. Fullerton, HY Feb. 93, p244-261.

Typhoons

Demonstrated Success in Reducing Risk of Losses in a Severe Hurricane: Hurricane Omar Experience, Juan C. Tenorio and Jack B. Jones, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p716-725.

The Determination of Typhoon Design Wave By Synthetic Probibility Method, Nai Kuang Liang and Hai Kuan Peng, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994),

p1040-1047.

Hurricane Iniki and Typhoon Omar Meteorology, Thomas A. Schroeder, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p84-91.

Instrumented Buoy Network Response to Ocean Swell, Theodore Mettlach and David Gilhousen, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and

J. Michael Hemsley, ed., 1994), p28-44.

Reducing the Risks of Severe Windstorm Disaster; an International Perspective, Alan G. Davenport, (Hurricanes of 1992: Lessons Learned and Implications for the Fu-ture, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p147-157.

U.S. Air Force

NPDES Storm Water Permit Compliance at Air Force Installations, Paul Makowski and Marvin Smith, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1224-1228.

U.S. Army Corps of Engineers

Admixtures May Add Months to Construction Schedules, ET Dec. 94/Jan. 95, p1,4.

Application of Dredge Monitoring Systems to Dredge Contract Administration Quality Assurance, Stephen H. Scott and Jeffrey D. Jorgeson, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p776-785.

Corps' CPAR Program Enters Sixth Year, CE Mar. 94, p8. Corps-Modified Levees Just Ducky for Waterfowl, CE

Apr. 94, p22.

The Development of a Wave Data Analysis Standard for a National Wave Measurement Program, Michael Tub-man, Marshall Earle and David McGehee, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p547-553.

Guidance for Wetland Restoration with Dredged Material, Michael R. Palermo and Elba A. Dardeau, Jr., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p956-960.

Hanford B Reactor, Now a Half-Century Old, Is ASCE

Landmark, NE May 94, p16.

Managing Uncertainty in Environmental Remediation Project Planning, Guru N. Rao and Francois Grobler, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p208-215.

More Testing for Composites, ET Oct./Nov. 94, p11.

The Navigation Data Center and Its Role in Dredging Management, Virginia R. Pankow, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p490-498.

Partnering Pardign, Herbert F. Harback, Donald L. Basham and Robert E. Buhts, ME Jan./Feb. 94, p23-27

Pentagon to Undergo Billion-Dollar Rehab, CE May 94, p11-12.

President Clinton Honors Federal Design Winners, CE July 94, p14,16.

Program Takes the Stress Out of Calculating, CE May 94, p94.

Quantifying Flood Damage Uncertainty, David A. Moser, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p201-218.

Reliability-Based Assessment of Corps Structures, Mary Ann Leggett, (Risk-Based Decision Making in Water Re-sources VI, Yacov Y. Haimes, ed., David A. Moser, ed.

and Eugene L. Stakhiv, ed., 1994), p73-81

Risk Simulation Model for Rehabilitation Studies, Richard Males, David Moser, Michael Walsh, Walter Grayman and Craig Strus, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p274-279.

Risk-Based Analysis for Flood Damage Reduction, Darryl W. Davis and Michael W. Burnham, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes. ed., David A. Moser, ed. and Eugene L. Stakhiv, ed.,

1994), p194-200.

Risk-Based Budgeting for Maintenance Dredging, Michael R. Walsh and David A. Moser, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p234-242.

Simplified Soil-Nailing System Ready to Stanch Steep Embankments, ET Oct./Nov. 94, p8.

Soft Dikes an Answer to Stone-Dike Collisions, CE Sept.

94, p20-21. Stake No More?, ET Dec. 94/Jan. 95, p11.

Use of HEC-2 and HEC-6 to Determine Levee Heights and Revetment Toe Scour Depths, David T. Williams and David Cozakos, (*Hydraulic Engineering* '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1075-

Water Injection Takes the Bucket Out of Dredging, CE Oct. 94, p21-22,24.

U.S. Geological Survey

Evaluation of a 6-Wire Thermocouple Psychrometer for Determination of In-Situ Water Potentials, Carole L. Loskot, Joseph P. Rousseau and Mark A. Kurzmack, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

The State (By State) of Water Quality, CE Mar. 94, p8.

Testing Conceptual Unsaturated Zone Flow Models for Yucca Mountain, Tim P. Brown, Linda L. Lehman and John L. Nieber, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1999-2006.

U.S.S.R.

Letter From Moscow, WP Special issue 94, p39.

Ukraine

Concept and Programme "Radioactive" Waste Disposal in Geological Formations of Ukraine, D. P. Khrushchov, M. P. Umanets and Eu. A. Yakovlev, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p2305-2309.

Methodology of Scientific Investigations for Radioactive Waste Disposal in Geological Formations of Ukraine, D. Waste Disposal in Geological Formatoris of Channe, D.
P. Khrushchov, O. M. Kharitonov and Eu. A. Yakovlev,
(High Level Radioactive Waste Management, High
Level Radioactive Waste Program Committee, 1994),

p1514-1520.

Preliminary Investigation Results as Applied to Utilization of Ukrainian Salt Formations for Disposal of High-Level Radioactive Waste, Stella B. Shekhunova, Oleg I. Petrichenko and Dmitry P. Khrushchov, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p1880-1885.
Preliminary Results of Investigation of the Ukrainian

Shield Geological Formations for Radioactive Wastes Disposal, L. S. Galetsky, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p1886-1890.

Ultimate loads

Bolted Connections for GFRP Laminated Structural Members, Nahla K. Hassan, Charles N. Rosner and Sami H. Rizkalla, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1018-1025.

The Effect of Member Snap on Progressive Collapse of Space Structures, Nicholas F. Morris, (Dynamic Response and Progressive Failure of Special Structures,

Ramesh B. Malla, 1993), p17-31.

Inelastic and Stability Anlysis of Flexibly Connected Steel Frames by Springs-in-Series Model, C. Y. Yau and S. L. Chan, ST Oct. 94, p2803-2819.

Old Concrete Slab Bridges. I: Experimental Investigation, A. Azizinamini, T. E. Boothby, Y. Shekar and G. Barnhill, ST Nov. 94, p3284-3304.

Old Concrete Slab Bridges. II: Analysis, A. Azizinamini, Y. Shekar, T. E. Boothby and G. Barnhill, ST Nov. 94, p3305-3319.

P-Ultimate for Undrained Analysis of Laterally Loaded Piles, James D. Murff and Jed M. Hamilton, GT Jan. 93, p91-107.

Ultimate Load Test of Slab-on-Girder Bridge, Baidar Bakht and Leslie G. Jaeger, ST June 92, p1608-1624.

Ultimate strength

Classification of Semi-Rigid Connections Based on the Elastic-Plastic Mechanical Behavior of Frames, Yoshiaki Goto, Satoshi Miyashita and Wai-Fah Chen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1191-1196.

Compressive Strength of Large Scale HSLA-80 Steel Cel-lular Sections of a Double Hull Ship Structure, Alan Ah-Kum Pang, James M. Ricles, Le-Wu Lu and Perry Green, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1538-1543.

Design Aids for Reinforced Concrete Columns, Bao-Jun Sun and Zhi-Tao Lu, ST Nov. 92, p2986-2995.

Design Techniques for Rectangular Lunar Modules, Mark E. Schroeder, Philip J. Richter and Jim Day, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p176-185.

Development Length and Ultimate Strength of Fiberglass Pretensioned Beams, Mohsen A. Issa and Ahmed Amer, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p408-416.

Effect of Bolt Slippage on Ultimate Behavior of Lattice Structures, S. Kitipornchai, F. G. A. Al-Bermani and A. H. Peyrot, ST Aug. 94, p2281-2287.

Effective Width of Locally Buckled Plates in Compression and Bending, Tsutomu Usami, ST May 93, p1358-1373.

Externally Stiffened I-Beam to Box-Column Connections, N. E. Shanmugam, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p719-724.

Reliability Assessment of Prestressed Concrete Beams, Ali S. Al-Harthy and Dan M. Frangopol, ST Jan. 94, p180-199.

Substantiated Risk Assessment of Jacket Structure, P. S. Tromans and J. W. van de Graaf, WW Nov./Dec. 94, p535-556.

Ultimate Resistance of Unstiffened Multiplanar Tubular TT- and KK-Joints, Joop C. Paul, Yuji Makino and Yoshiaki Kurobane, ST Oct. 94, p2853-2870.

Ultrasonic testing

Fatigue-Reliability Updating Through Inspections of Steel Bridges, Zhengwei Zhao, Achinyta Haldar and Florence L. Breen, Jr., ST May 94, p1624-1642.

Laser Generation and Detection of Ultrasound in Concrete, Laurence J. Jacobs, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1328-1333.

NDE for Steel Bridges: FHWA Research, Past, Present and Future, Steven B. Chase, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1060-1064.

New Ultrasonic Device Sounds Out Bridges, ET Dec. 94/Jan. 95, p9.

Ultrasonic Rock Fracture Characterization, G. Danko, G. Zhan, Cs. Mezei, J. Daemen and P. Mousset-Jones, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2789-2796.

URSULA: Design of an Underwater Robot for Nuclear Reactor Vessel Inspection, J. Barry Fallon, Steven B. Shooter, Charles F. Reinholtz and S. William Glass, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p311-319.

Vibratory Extraction of Clay Fines from Subsurface, Lakshmi N. Reddi, A. Hadim, R. N. Prabhushankar and

F. Shah, EE Nov./Dec. 94, p1544-1558.

Ultraviolet radiation

Overview of Space Environmental Effects, Alan J. Watts, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p628-637.

Photocatalytic Transformations and Degradation of 2,4,6-trinitrotoluene (TNT) in TiO2 Slurries, Daniel C. Schmelling and Kimberly A. Gray, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p751-755.

Uncertainty analysis

Bayes' Theorem and Quantitative Risk Assessment, Stan Kaplan, (Risk-Based Decision Making in Water Re-sources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p186-193

Behavioral, Social, and Institutional Aspects of Risk Analysis, Richard C. Schwing, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p340-341.

Breakout Session 3B: Traffic Projections and Uncertainties, David Boyce, David Hartgen and Peter Stopher, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p151.

Considering Uncertainties in Water Resource Designs, Yeou-Koung Tung, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p457-460.

Designing Under Uncertainty When We Can Reduce Uncertainty: When is Another Observation Worth the Cost? J. Wayland Eheart, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry

N. Tuvel, ed., 1994), p461-464.

Developments in Risk Analysis Commercial Software, Charles Yoe, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p243-262.

Dynamic Modal Responses of Wave-Excited Offshore Structures, G. D. Hahn and J. R. Sanghvi, EM Apr. 94, p893-908.

Grey Dynamic Programming for Waste-Management Plan-ning under Uncertainty, Guo H. Huang, Brian W. Baetz and Gilles G. Patry, UP Sept. 94, p132-156.

Identification and Uncertainty Estimation of Structural Parameters, C. G. Koh and L. M. See, EM June 94, p1219-

Identifying Significant Uncertainties in Thermally Dependent Processes for Repository Performance Analysis, James D. Gansemer and Alan Lamont, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2197-2206.

Integration of Reliability, Uncertainty and Optimization in Hydraulics Systems: Classification of Problem Types, Kevin E. Lansey, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N.

Tuvel, ed., 1994), p262-265.

Integration of Reliability, Uncertainty and Optimization in Hydraulics Systems: Structural Reliability, Kevin E. Lansey, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p266-269.

Interpretive and Modelling Problems of Risk and Uncertainty in Bidding Techniques, David Eaton, (Computing in Civil Engineering, Khalil Khozeit ich, ed., 1994),

p2038-2045.

PA Phase 2 Sensitivity and Uncertainty Analysis, Virginia Colten-Bradley, Richard Codell and M. Rose Byrne, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1480-1491.

Managing Uncertainty in Environmental Remediation Project Planning, Guru N. Rao and Francois Grobler, (Computing in Civil Engineering, Khalil Khozeimeh, ed.,

1994), p208-215.

Managing Uncertainty in Project Planning and Execution: Introduction and Overview, Guru N. Rao, Francois Grobler and Liang Y. Liu, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p33-40.

Methods for Measuring Discharge under Ice Cover, John F. Walker, HY Nov. 94, p1327-1336.

The MOUSE Uncertainty Analysis System, Albert J. Klee, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p372-379. Practical Approach to Cope with Construction Cost Uncertainty in an Inflationary Environment, Diego Echeverry and Jorge Garcia, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2149-2156.

Khaii Kiozeinien, ed., 1994), p.2149-2130.
Probabilistic Modeling of Scheduling Uncertainty: Methods and Tools, Ali Touran, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p380-383.

Quantification of Cost Uncertainties Using Neural Network Technique, Awad S. Hanna and Li-Chung Chao, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p41-46.

Quantifying Flood Damage Uncertainty, David A. Moser, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p201-218.

Range Estimating - User-Friendly Risk Analysis, Kevin M. Curran, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p47-54.

Reliability Applied to Slope Stability Analysis, John T. Christian, Charles C. Ladd and Gregory B. Baecher, GT Dec. 94, p2180-2207.

Risk of Extreme and Catastrophic Events, Jim Lambert, (), p345-347.

Risk-Based Analysis for Flood Damage Reduction, Darryl W. Davis and Michael W. Burnham, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p194-200.

Risk-Based Management of Uncertainty During Project Planning and Execution, Angel L. Rivera and Juan J. Ferrada, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p384-389.

Subjective De-Biasing of Data Sets: A Bayesian Approach, M. Elisabeth Paté-Cornell, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p175-185. Superfund Decision Analysis in Presence of Uncertainty, Aaron A. Jennings, Neel Mehta and Sumeet Mohan, EE Sept./Oct. 94, p1132-1150.

Synthetic Estimation of Development Cost of Satellite, Yilin Zhu, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1512-1520.

A Theoretical Framework for Risk Assessment, George Apostolakis, (Risk-Based Decision Making in Water Re-sources VI, Yacov Y. Haimes, ed., David A. Moser, ed.

and Eugene L. Stakhiv, ed., 1994), p82-88.

Treatment of Uncertainty in the NRC Regulatory Process J. Michael McGarry, III and F. Stanley Echols, (High Level Radioactive Waste Management, High Level Ra-dioactive Waste Program Committee, 1994), p1404-

Uncertain Reasoning in a Pavement Management System, B. N. O. Attoh-Okine, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p326-332.

Uncertainties in the Prediction of Hurricane Windspeeds, L. A. Twisdale, P. J. Vickery and M. B. Hardy, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p706-715

Uncertainty Analysis of Dredge Production with Correla-tion, Said M. Easa, WW Sept./Oct. 94, p499-507.

Uncertainty Analysis of Dredge-Production Measurement and Calculation, Stephen H. Scott, WW Mar./Apr. 93, p193-203.

Uncertainty and Time Preference in Shore Protection, Kevin O'Grady and Leonard Shabman, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p136-154.

Uncertainty in Reservoir Operation Optimisation, Kevin S. Tickle and Ian C. Goulter, (Water Policy and Manage-ment: Solving the Problems, Darrell G. Fontane, ed. and

Harry N. Tuvel, ed., 1994), p363-367

Uncertainty versus Computer Response Time, William D. Rowe, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eu-

gene L. Stakhiv, ed., 1994), p263-273.

When and How Can You Specify a Probability Distribu-tion When You Don't Know Much? Yacov Y. Haimes, Timothy Barry and James H. Lambert, (Risk-Based Decision Making in Water Resources VI, Yacov Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p19-25.

Uncertainty principles

Anatomy of Best Estimate, Leo R. Beard, HY June 94,

Optimizing River Diversion under Hydraulic and Hydro-logic Uncertainties, Abbas Afshar, Ahmad Barkhordary and Miguel A. Mariño, WR Jan./Feb. 94, p36-47.

Undergraduate study

Civil Engineering Undergraduate Education in Japan: System Overview, Masanori Tsuji and Antonio Nanni, El Apr. 94, p135-144.

omputer-Aided Laboratory Teaching in Geotechnics, I. E. G. Davey-Wilson, El Oct. 94, p430-435.

Experiences with an Undergraduate Structural Engineering aboratory, Stephen Pessiki, Le-Wu Lu and Ben T. Yen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1369-1374.

Innovative Introduction to Civil Engineering Curriculum, E. F. Glynn and W. B. Fergusson, El Apr. 94, p149-157. Integrated Capstone Design Experience, Everett E. McEwen, El Apr. 94, p212-220.

M. Holzer and Raul H. Andruet, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p308-314.

Teaching Structural Loading: A Case Study, R. Panneer Selvam, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1375-1378.

Transportation Capstone Design Project: Review and Future Directions, John G. Schoon, El Jan. 94, p70-89.

Water Resources Education and Research at a Model HBCU Water Resources Center, Victor I. Okereke, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p85-88.

Where do the Arrows Come From? Evaluating Structural Loads, Duane S. Ellifritt, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1364-1368.

Underground construction

Analysis of Deep Excavation in Boston, Andrew J. Whittle, Youssef M. A. Hashash and Robert V. Whitman, GT Jan. 93, p69-90.

Boston's Backup Water Supply, Lawrence J. Bergen, CE Mar. 94, p66-68.

Case Study - Performance of Diaphragm Walls During Construction; Predictions vs. Field Measurements, Abdol R. Haghayeghi and Mehrdad Mirzakashani, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p264-270.

Development of a Mechanical Alcove Excavator for the Yucca Mountain Exploratory Study Facility, Erika Rönnkvist, James E. Friant and Levent Ozdemir, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p411-416.

Geotechnical Baseline Reports, Teresa Austin, CE Dec. 94,

Study of Stress Concentrations at the Intersection of Underground Chambers for the Superconducting Super Collider Project, Fwu-Ding (Kim) Lin, Lichu Guan and Steven Baldauf, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1975-1982.

Underground mines

Surface Subsidence Prediction by Nonlinear Finite-Element Analysis, Yacoub Najjar and Musharraf Zaman, GT Nov. 93, p1790-1804.

Underground storage

Analyses of Releases Due to Drilling at the Potential Yucca Mountain Repository, R. W. Barnard, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1292-1297.

Analysis of Potential Highway Routes to Yucca Mountain, Shashi K. Sathisan, Emelinda M. Parentela and Michael S. Lee, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p1278-1285.

The Application of Thermal Rock Bolts in the Thermal Design of a Nuclear Waste Repository, George Danko, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p890-898.

Aquifer Storage and Recovery in the Floridan Aquifer System of South Florida, Albert Muniz and William B. Ziegler, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel,

ed., 1994), p69-72.

Assessment of Rock Bolt Systems for Underground Waste Storage, Wesley T. Leedy and Robert J. Watters, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p691-695.

Bio-Remediation of Simulated Fire Training Facility, Don-ald P. Butcher and Peter C. Gaskin, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p127-136.

The Case for Retrievable High-Level Nuclear Waste Disposal, Eugene H. Roseboom, Jr., (High Level Radioac tive Waste Management, High Level Radioactive Waste

Program Committee, 1994), p1774-1781.

Concept and Programme "Radioactive" Waste Disposal in Geological Formations of Ukraine, D. P. Khrushchov, M. P. Umanets and Eu. A. Yakovlev, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p2305-2309.

Concept for Hazardous Material Management and Container Closure Using Copper Based Alloys, Holt Murray, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1000-1007.

Corrosion Scenario Development for Corrosion Lifetime Prediction of Carbon Steel Used for Geological Disposal Package, Takanori Fukuda, Guen Nakayama and Masatsune Akashi, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p977-983.

mittee, 1994), p977-983.

Czech Program of Underground Repository for ILW and HLW Radioactive Wastes, Michal Vanecek, (High Level Radioactive Waste Management, High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2310-2314.

Decision Analysis of Hanford Underground Storage Tank Waste Retrieval Systems, M. W. Merkhofer, D. A. Bitz, Leveliev, (High Level), editor strikes and Leveliev (High Level).

D. L. Berry and L. J. Jardine, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p1739-1744.

Development and Feasibility of a Waste Package Coupled Reactive Transport Model (AREST-CT), David W. Engel, B. Pete McGrail, James A. Fort and Janet S. Roberts, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1214-1221.

DOE Waste Gets Big Chill, ET Oct./Nov. 94, p1,7.
An Evaluation of Rail Access Routes to Yucca Mountain, Shashi K. Sathisan and Emelinda M. Prarentela, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1270-1277

Exploratory Studies Facility and Potential Repository Source Term, J. D. Smith, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p549-553.

Focus on High-Level Waste Repository Management and Regulation a Rate Regulator's Perspective, Emmit J. George, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Commit-

ment, right Level Radioactive waste Program Commit-tee, 1994), p1521-1524. FY93 Thermal Loading Systems Study, Steven F. Saterlie and Brent H. Thomson, (*High Level Radioactive Waste* Management, High Level Radioactive Waste Program Committee, 1994), p573-585.

Heat Transfer Modeling in Burial Sites Containing Heat-Generating Waste, Mohamed Alsharif, Iqbal Ahmed and Paul Dickiman, (*High Level Radioactive Waste Manage-*ment, High Level Radioactive Waste Program Committee, 1994), p899-906. Implication of Waste Package Heat Output Distributions

Resulting From Waste Stream Variability, John F. King, Carol J. Rhodes and Steven F. Saterlie, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p868-876.

Implications of Theories of Asteroid and Comet Impact for Policy Options for Management of Spent Nuclear Fuel and High-Level Radioactive Wastes, Newell J. Trask, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1324-1328.

Integration of Regulations and Science for HLW Disposal, Lawrence D. Ramspott, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p292-295.

Interfaces Between Transport and Geologic Disposal Systems for High-Level Radioactive Wastes and Spent Nuclear Fuel-A New International Guidance Document, R. B. Pope, K. W. Han, T. Pollog, L. Baekelandt, D. Blackman, J.-M. Hoorelbeke and J. E. Villagran, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1229-1236

Leaching from Cementitious Waste forms in Belowground Vaults, John C. Walton, EE Nov./Dec. 94, p1507-1523.

Long-Term Evolution of the Biosphere in the Context of High-Level Waste Repository, Marianne Menut and Catherine Valentin-Ranc, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2152-2159.

Methodology of Scientific Investigations for Radioactive Waste Disposal in Geological Formations of Ukraine, D. P. Khrushchov, O. M. Kharitonov and Eu. A. Yakovlev, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1514-1520.

Novel, Low-Vibration Excavation Techniques for Underground Radioactive Waste Storage, Wilhelm J. Kogelmann, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p417-429.

Numerical Studies of Radionuclide Migration in Layered Porous Media, Robert L. Buckley, Sudarshan K. Loyal-ka and M. M. R. Williams, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p1842-1847.

Petroleum Contaminated Soils in Highway Construction, Jay N. Meegoda, A. Samer Ezeldin, David A. Vaccari and Robert T. Mueller, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p904-911.

Prediction of Cladding Life in Waste Package Environments, J. Kevin McCoy and Thomas W. Doering, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p565-572.

Preliminary Investigation Results as Applied to Utilization of Ukrainian Salt Formations for Disposal of High-Level Radioactive Waste, Stella B. Shekhunova, Oleg I. Petrichenko and Dmitry P. Khrushchov, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p1880-1885.

Preliminary Results of Investigation of the Ukrainian Shield Geological Formations for Radioactive Wastes Disposal, L. S. Galetsky, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p1886-1890.

Recent Advances in Precision Surveying Technology and Integrated Deformation Analysis, Adam Chrzanowski, W. Trevor Greening and Anna Szostak-Chrzanowski, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p721-731.

Role of U.S. Nuclear Regulatory Commission's On-Site Representatives in Pre-Licensing Activities for a High-Level Radioactive Waste Repository, Philip S. Justus and John Gilray, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1712-1715.

Site Characterization Plan Thermal Goals Reevaluation, Steven F. Saterlie and J. C. de la Garza, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p882-889.

Spent Fuel Characteristics Relevant to High-Level Waste (HLW) Source Term, Hersh K. Manaktala, Prasad K. Nair and Charles G. Interrante, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p560-564.

Standards and Regulations for Geologic Disposal of High Level Waste: An Issues Framework, S. S. Sareen, S. J. Brocoum and T. A. Cotton, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p1393-1396.

Status-NRC's QA Overview of the High-Level Nuclear Waste Geologic Repository, William L. Belke and Kenneth R. Hooks, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1716-1721.

Storage Tanks: Going Above Ground, Thomas C. Wilson, CE Mar. 94, p59-61.

Structured Tradeoffs Preference Elicitation: Evaluating CRWMS Design and Operations, Hollister Hartman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p619-626.

Tank Waste Information Network System (TWINS), Gary D. Roberson, Jim Brown and Dana S. Roberson, (High Level Radioactive Waste Management, High Level Ra-dioactive Waste Program Committee, 1994), p1731-

Ventilation Considerations for Repository Subsurface Advanced Conceptual Design, Hang Yang and Kalyan K. Bhattacharyya, (High Level Radioactive Waste Manage-ment, High Level Radioactive Waste Program Committee, 1994), p530-537.

Waste Package Materials Selection Process, Ajit K. Roy, Robert L. Fish and R. D. McCright, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p993-999.

Waste Package Performance Allocation System Study Report, Richard D. Memory, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

ranse management, ringit exert national waste rior gram Committee, 1994), p969-976. What Do We Mean By a "Cold Repository"? William G. Halsey, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2183-2188.

Underground structures
An Auxiliary Ventilation Design Approach for the ESF
Development at Yucca Mountain, P. Mousset-Jones and F. Calizaya, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p508-514.

Construction Monitoring Activities in the ESF Starter Tun-

nel, John Pott and Scott Carlisle, (High Level Radioactive Waste Management, High Level Radioactive Waste

Program Committee, 1994), p1993-1998.

Excavation Damage and Organic Growth in a 1.2m Diameter Borehole, R. A. Everitt, D. A. Brown, D.M. Boychuk and P. Gann, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2092-2100.

Foundation Slab for Lunar Base Construction, Mikiya Okumura, Yasuhiro Ohashi, Takao Ueno, Shojiro Motoyui and Kiosuke Murakawa, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1128-1137.

The French Mediation Mission: Siting of Underground Research Laboratories, Christian Bataille, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p249-257. Investigation and Design Concepts for a Nuclear Waste

Repository in the Kola Peninsula of Northwest Russia, Nikolay N. Melnikov and William R. Sharp, (High Level Radioactive Waste Management, High Level Radioac-

Radioactive waste Management, rigin Level Radioactive Waste Program Committee, 1994), p523-529.
Microtunneling Techniques to Form an Insitu Barrier Around Existing Structures, Philip J. Coller and David G. Abbott, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p386-394.

Monitoring of Structures During Repair of Underground Utilities, F. Dirk Heidbrink and John E. Pearson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Lood-

no, ed., 1994), p258-263.

Novel, Low-Vibration Excavation Techniques for Underground Radioactive Waste Storage, Wilhelm J. Kogel-mann, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p417-429.

1994), p417-429.
Shaffer, Thomas F. R. Winston Revie and Anita Mandal,
(High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p696-704.

Underpinning

Building Performance Founded on an Improved Sand in Recife, Brazil, J. F. T. Jucá, A. O. C. Fonte and I. D. S. Pontes Filho, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1202-1213.

Numerical Study of Underpinning by Piles for Settlement Control of Strip Foundations, M. Makarchian and H.G. Poulos, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and

Guy Y. Félio, ed., 1994), p303-313.

Stabilization and Expansion of Historic Navy Pier, Patrick M. Doher and Bernard J. Fekete, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p300-310.

Collectrow Collectrow Wave Decay and Undertow Modelling with Nearcir Code, F. Collado, A. Sánchez-Arcilla, M. G. Coussirat and J. Prieto, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p556-570.

Experimental Study of Undertow and Turbulence Intensity Under Irregular Waves in the Surf Zone, Nels J. Sultan and Francis C. K. Ting, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemslev, ed., 1994), p602-613

Sediment Transport by Wind Waves, Long Waves and Mean Currents: An Experiment on Nearshore Morpho-dynamics, Lake Huron, Canada, Troels Aagaard and Brian Greenwood, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed.,

1994), p14-28.

A Surfzone Parameter Sensitivity Analysis on LIP11D Sus-pended Sediment and Return Flow Measurements, G. Mocke, A. Reniers and G. Smith, (Coastal Dynamics 94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p571-585.

Undertow at SUPERTANK, Jane McKee Smith, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p220-232.

Verification of the Shearstress Boundary Conditions in the Undertow Problem, Marcel J. F. Stive and Huib J. De Vriend, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p533-542.

Underwater construction
Constructing Beneficial Use Dredged Material Projects,
Robert M. Parry, (Dredging '94, E. Clark McNair, Jr.,
ed., 1994), p547-554.

Cured-in-Place Pipe Doesn't Cause a Ripple, CE Feb. 94, p12,14,16.

Light at the End of the Chunnel, Virginia Fairweather, WP Special issue 94, p10-13.

Underwater inspection

URSULA: Design of an Underwater Robot for Nuclear Reactor Vessel Inspection, J. Barry Fallon, Steven B. Shooter, Charles F. Reinholtz and S. William Glass. (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p311-319.

Underwater pipelines

Cured-in-Place Pipe Doesn't Cause a Ripple, CE Feb. 94, p12,14,16.

Underwater structures

Experimental Verification of Numerical Model for Nonlinear Wave Evolutions, Takumi Ohyama, Serdar Beji, Kazuo Nadaoka and Jurjen A. Battjes, WW Nov./Dec. 94,

Water Waves Above Submerged Porous Plate, Xiping Yu and Allen T. Chwang, EM June 94, p1270-1282.

Wave Scattering by Submerged Porous Disk, Allen T. Chwang and Jianhua Wu, EM Dec. 94, p2575-2587.

Uniaxial tensile strength

Li, Qizhi, Richard A. Schultz, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2106-2111.

Chezy Formula Versus Theory and Common Sense, Witold Gustaw Strupczewski, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p662-666.

Design of Sewers Based on Minimum Velocity, Ismail I. Esen, EE May/June 93, p591-594.

Experimental Study of Debris Flows, Arbind Mainali and Nallamuthu Rajaratnam, HY Jan. 94, p104-123.

Normal-Depth Equations for Irrigation Canals, Prabhata K. Swamee, IR Sept./Oct. 94, p942-948.

Migration of Backward-Facing Step, Hong-Yuan Lee and Shie-Tsung Hwang, HY June 94, p693-705. Unified Design of Horizontal Circular Curves, Said M.

Easa, TE Jan./Feb. 93, p94-110.

Unit hydrographs

General Stochastic Unit Hydrograph, Allen Hjelmfelt and Menghua Wang, IR Jan./Feb. 94, p138-148.

Representation of Spatial Variability of Rainfall in Aggregated Rainfall-Runoff Models, Paolo Bartolini and Juan B. Valdés, HY Oct. 94, p1199-1219.

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United Arab Emirates

Upgrading Dubai's Sewers, Henry R. Derr and Bruce W. Jones, CE Aug. 94, p60-63.

Beneficial uses of dredged material principles and practice, T. Neville Burt and Michael P. Dearnaley, (*Dredging* '94, E. Clark McNair, Jr., ed., 1994), p631-643. Black & Veatch in Unique Overseas Partnership, CE Jan.

Brits Banned in Malaysia, WP Special issue 94, p4.
Building Procurement by Design and Build Approach, Issaka Ndekugri and Adrian Turner, CO June 94, p243256.

High Level Waste Disposal and Reprocessing in the UK, Nicholas L. Griffin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1690-1695.

Light at the End of the Chunnel, Virginia Fairweather, WP

Special issue 94, p10-13.

Progress in England and Wales on the Development of Beneficial Uses of Dredged Material, L. A. Murray, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p644-

United States

Black & Veatch in Unique Overseas Partnership, CE Jan. 94, p12-13.

Characteristics of the US Highway Bridge Population, Kenneth F. Dunker and Basile G. Rabbat, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1006-1013.

A Comparative Study of U.S. and Russian High-Level Waste Repository Design Concepts, Z. T. Bieniawski and E. V. Kuzmin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Com-

mittee, 1994), p515-522.

A Cooperative Agreement for Research on Radioactive Waste Management Between the United States Department of Energy and Atomic Energy of Canada Limited, Kenneth W. Dormuth and Robert A. Levich, (High Level Radioactive Waste Management, High Level Radioac-tive Waste Program Committee, 1994), p2409-2412.

Data Fusion for an ATIS Operational Test: Description and Computational Issues, Nagui M. Rouphail and Peter Nelson, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1532-1535.

Demands and Satisfiers for Automation and Robotics in Construction: Differences Between Japan and the United States, Hiroshi Saito and John G. Everett, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p419-426.

Development of Bridge Live Load Models, John M. Kulicki, (Structures Congress XII, N. C. Baker, ed. and

Barry J. Loodno, ed., 1994), p532-537.

Earning Empowerment From Stakeholders, Peter T. Johnson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p258-262.

Evaluation of Design Wind Loads for Manufactured Homes and Needed Improvements, R. D. Marshall, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p185-194.

GPS Mapping Van Hits the Road, CE Dec. 94, p11-12. GSA Takes the Lead in Metric Construction, NE Jan. 94, p15.

Implementation of Passive Energy Dissipation Systems in the United States, Andrew S. Whittaker and Ian D. Aiken, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1280-1285.

Increasing the Credibility of Scientific Analyses, Thomas A. Cotton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p296-300.

Kumar, Prasanna N. Jeffrey R. Williams, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1365-1371.

Move to Metric? Internal Economy Couldn't Afford the Change (ltr), CE Apr. 94, p32-33.

NAFTA Opens Markets to U.S. Engineers, CE Jan. 94,

p114.

Negotiating Equity for Management of DOE Wastes, Sam A. Carnes, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1-8.

No Crash in Sight for U.S. Economy, According to Fore-casts, CE Nov. 94, p12-13.

Overview and Status of NRC's High-Level Waste Repository Program, Mark S. Delligatti, Joseph J. Holonich and B. J. Youngblood, (*High Level Radioactive Waste Management*, High Level Radioactive Waste Program Committee, 1994), p1597-1603.

Recycling Rate May Have Peaked, CE Dec. 94, p8.

Seismic Performance of Railway Bridges, V. Sharma, J. Choros, E. M. Maragakis and W. G. Byers, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p367-372.

Seismic Research Program for Highway Construction, Ian G. Buckle and Ian M. Friedland, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994),

p373-379.

Seismic Study of Historic Bridges in Eastern United States, Constantine C. Spyrakos, Emory L. Kemp and Ramesh Venkatareddy, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p380-386.

Sensitivity Analysis of Bridge Equations, Jeffrey S. Glenn, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p11-15.

Space Commercialization: Problems of Law and Policy, Glenn H. Reynolds, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1462-1470.

Space Exploration: Getting a Handle on "Why?", Gordon R. Woodcock, (Engineering, Construction, and Opera-tions in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p960-968.

A Summary of the NEPSTP Nuclear Safety Program, Albert C. Marshall and G. Kompanietz, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p708-716.

TOPAZ II Qualification and Nuclear Testing Program, G. L. Schmidt, F. Thome, B. Ogloblin and E. Glushkov, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p729-738.

TOPAZ II System Description, Susan S. Voss, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p717-728.

The Tracking of High Level Waste Shipments—Transcom System, P. E. Johnson, D. S. Joy, R. B. Pope, T. M. Thomas and P. B. Lester, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1242-1248.

Tunnelers Assess Markets and Machines, CE Aug. 94, p14. U.S. / Japan Large Scale Cooperative Research Program for Steel Structures, Robert D. Hanson, (Structures Con gress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p103-108.

U.S., Japan Bridge Gaps in Culture and Construction Practice, ME Mar./Apr. 94, p1.

Verification of the AECL Total System Performance Modeffication of the AELL Total System renormance models, Keith Kersch and Steve Oliver, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p2437-2441.

Civil Engineer Peirano, a Gold Miner's Great-Grandson, Endows Environmental Faculty Chair at Berkeley, NE Mar. 94, p16.

Educating A Structural Engineer, J. A. Bohinsky and J. P. Lee, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1352-1357.

A Borehole Instrumentation Program for Characterization of Unsaturated-Zone Percolation, Jack Kume and Joseph P. Rousseau, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2076-2083.

- The Effect of Fuel Type in Unsaturated Spent Fuel Tests, P. A. Finn, M. Gong, J. K. Bates, J. W. Emery and J. C. Hoh, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1080-1087.
- Effective Unsaturated Hydraulic Property Determination with the Renormalization Group Approach: Methodology, Sitakanta Mohanty and Amvrossios C. Bagtzoglou, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2660-2668.
- Estimating Two-Phase Hydraulic Properties by Inverse Modeling, Stefan Finsterle and Karsten Pruess, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2160-2167.
- A Gas Sampling System for Withdrawing Humid Gases From Deep Boreholes, Joseph P. Rousseau, William Thordarson and Mark A. Kurzmack, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2139-2145.
- Inferences of Paleoenvironment From Petrographic, Chemical and Stable-Isotope Studies of Calcretes and Fracture Calcites, David T. Vaniman and Joseph F. Whelan, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2730-2737.
- Kwicklis, Edward M. Alan L. Flint and Richard W. Healy, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2341-2351.
- Mathematical Modeling of Saturated-Unsaturated Flow to Drains, Saleem Ahmad, Deepak Kashyap and B. S. Mathur, IR Jan./Feb. 93, p18-33.
- Modeling Heretogeneous Ünsaturated Porous Media Flow at Yucca Mountain, Thomas H. Robey, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p.2678-2684.
- Results of Prototype Borehole Instrumentation at the Hydrologic Research Facility, Area 25, NTS, Joseph Rousseau, Mark Kurzmack and Alison Greengard, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2764-2773.
- The Role of Fracture Coatings on Water Imbibition Into Unsaturated Tuff, Vijay S. Chekuri, Scott W. Tyler and John W. Fordham, (*High Level Radioactive Waste Management*, High Level Radioactive Waste Program Committee, 1994), p1891-1896.
- Saturation Levels and Trends in the Unsaturated Zone, Yucca Mountain, Nevada, Philip H. Nelson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2774-2781.
- Selenite Transport in Unsaturated Tuff From Yucca Mountain, James L. Conca and Ines R. Triay, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2175-2182.
- Some Results from the Second Iteration of Total-System Performance Assessment for Yucca Mountain, Michael L. Wilson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1655-1662.
- Stochastic Analysis of Unsaturated Flow and Transport With the Suffat Executive Numerical Code, Amvrossios C. Bagtzoglou, M. Rashidul Islam and Michael Muller, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2669-2677.
- Studies of Non-Isothermal Flow in Saturated And Partially Saturated Porous Media, Clifford K. Ho, Kevin S. Maki and Robert J. Glass, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2481-2491.
- Testing Conceptual Unsaturated Zone Flow Models for Yucea Mountain, Tim P. Brown, Linda L. Lehman and John L. Nieber, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1999-2006

- Thermosyphon Analysis of a Repository: A Simplified Model for Vapor Flow and Heat Transfer, Randall D. Mateufel and Mark W. Powell, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2207-2216.
- Unsaturated Flow Experiment with Phase Change—The Heat Pipe Effect, A. Izzeldin, E. Hanson and R. Boehm, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2475-2480.
- Unsaturated Flow Modeling—Exact Solution to Approximate Problem? Lakshmi N. Reddi and Sampath K. R. Danda, WR Mar./Apr. 94, p186-198.
- Wetting Phase Permeability in a Partially Saturated Horizontal Fracture, M. J. Nicholl and R. J. Glass, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2007-2019.

Unsteady flow

- A 2D numerical simulation of the Po river delta flow, D. Ambrosi, S. Corti, V. Pennati and F. Saleri, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p18-29.
- Computation Method for Regulating Unsteady Flow in Open Channels, Fubo Liu, Jan Feyen and Jean Berlamont, IR Sept./Oct. 92, p674-689.
- Experimental Study on Turbulent Structures in Unsteady Open-channel Flows, Iehisa Nezu, Akihiro Kadota and Hiroji Nakagawa, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p185-194.
- Experimental Study on Unsteady Flow in Open Channels with Flood Plains, A. Tominaga, M. Nagao and I. Nezu, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p396-405.
- Finite-Volume Two-Dimensional Unsteady-FLow Model for River Basins, D. H. Zhao, H. W. Shen, G. Q. Tabios, III, J. S. Lai and W. Y. Tan, HY July 94, p863-883.
- Fortification of MMOC Models for Steep-Channel Flows, Chintu Lai, Der-Liang Young and Jen-Ter Chang, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1290-1294.
- Modeling Unsteady Open-Channel Flows—Modification to Beam and Warming Scheme, Akhilesh Kumar Jha, Juichiro Akiyama and Masaru Ura, HY Apr. 94, p461-476.
- Multicomponent-Flow Analyses by Multimode Method of Characteristics, Chintu Lai, HY Mar. 94, p378-395.
- Numerical Experiments on Instability in Unsteady Flow Modeling, Chin-lien Yen and Ming-hsi Hsu, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1275-1279.
- Reconstruction of Concentration Boundary Condition for Unsteady Pesticide Transport Modeling, Deborah J. Mossman and Nael Al Mulki, (Hydraulic Engineering '94', George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p160-164.
- Significance of Averaging Coefficients in Open-Channel Flow Equations, Renjie Xia and Ben Chie Yen, HY Feb. 94, p169-190.
- Treatment of Nonhomogeneous Terms in Flow Models, Raymond W. Schaffranek and Chintu Lai, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p522-527.

Unlift

- Beam Model for Base-Uplifting Analysis of Cylindrical Tanks, P. K. Malhotra and A. S. Veletsos, ST Dec. 94, p3471-3488.
- Failure Stages in Timber Fixed Piers: Design for Minimal Reconstruction After a Storm, Ion Guerry Taylor and Mark D. Bolchoz, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p406-413.
- Nonlinear Model for Building-Soil Systems, D. B. McCallen and K. M. Romstad, EM May 94, p1129-1152.
- Performance of Prestressed Concrete Roofs During Hurricane Andrew, Wimal Suaris and Mohammed S. Khan, CF Feb. 94, p16-30.

Prestressed Concrete Failures Due to Uplift, Wimal Suaris, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1433-1438.

Uplifting Analysis of Base Plates in Cylindrical Tanks, P. K. Malhotra and A. S. Veletsos, ST Dec. 94, p3489-3505.

Uplifting Response of Unanchored Liquid-Storage Tanks, P. K. Malhotra and A. S. Veletsos, ST Dec. 94, p3525-3547.

Waterproofing a Structural Slab at Ground Anchor Locations, David L. Druss, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p77-92.

Unlift pressur

Distress in Prestressed Concrete Roof Girders at a Cement Plant, W. P. S. Dias, A. D. C. Jayanandana, M. C. M. Fonseka and A. A. D. A. J. Perera, CF Feb. 94, p6-15.

Evaluation of Roof Sheathing Fastening Schedules for High Wind Uplift Pressures, Thomas P. Cunningham, Jr., (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p330-339.

Testing Methods for Roof Systems, Phillip J. Smith, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p340-349.

Uplift Modeling for Fracture Mechanics Analysis of Concrete Dams, Raymond R. Dewey, Ronald W. Reich and Victor E. Saouma, ST Oct. 94, p3025-3044.

Uplift resistance

Pipe Uplift Resistance in Frozen Soil and Comparison with Measurements, A. Foriero and B. Ladanyi, CR Sept. 94, p93-111.

Uplift Capacity of Small-Diameter Drilled Shafts from In Situ Tests, Alan J. Lutenegger and Gerald A. Miller, GT Aug. 94, p1362-1380.

Uplift Resistance of Plywood and OSB Roof Sheathing, S. D. Shiff, D. P. Mizzell and M. D. Zaitz, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1054-1059.

Uraniun

Active Versus Passive Radon Monitoring at the Yucca Mountain Site, Michael D. Griffin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1953-1958.

The Case for Retrievable High-Level Nuclear Waste Disposal, Eugene H. Roseboom, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1774-1781.

Categorization of Department of Energy Spent Nuclear Fuel, Denzel L. Fillmore, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p315-319.

The Cigar Lake Analog Study: An Interational R&D Project, Jan J. Cramer and F. Peter Sargent, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2237-2242.

Comparison of Uranium Dissolution Rates From Spent Fuel and Uranium Dioxide, S. A. Steward and W. J. Gray, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2602-2608.

A Coupled Mass Transfer and Surface Complexation Model for Uranium (VI) Removal from Wastewaters, John Lenhart, Linda A. Figueroa and Bruce D. Honeyman, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p.249-256.

Dry Storage of Highly Enriched Uranium Fuel, D. L. Lord, J. A. Carter and L. F. Ermold, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), pl 131-1136.

Effects of Policy and Other Changes on Transuranic Waste Disposal at WIPP, Robert H. Neill and Lokesh Chaturvedi, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p.280-284. Fabrication Options for Depleted Uranium Components in Shielded Containers, Susan B. Derrington, James E. Thompson and Cameron W. Coates, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p942-948.

Final Storage of High Activity Waste in Spain, Aurelio Ulibarri, Fernando Huertas and Jesús Alonso, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p538-548.

Fitted Analytical Expressions Giving the Enrichment in U235 of a Fresh Fuel Equal to a Spent PWR Fuel, J. Anno, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p757-764.

Geoscientific Studies in the Tono Area, Japan, T. Nohara, T. Tsuboya, M. Yamakawa, H. Sakuma and Y. Yusa, (High Level Radioactive Waste Managemen, High Level Radioactive Waste Program Committee, 1994), p2243-2250.

Gully Potential in Soil-Covered Uranium Waste Impoundments, Steven R. Abt, Christopher J. Pauley, Scott A. Hogan and Terry L. Johnson, EY Aug. 94, p51-66.

In Situ Photothermal Deflection Spectroscopy of Uranium Dioxide Dissolution, James D. Rudnicki, Richard E. Russo and David W. Shoesmith, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2609-2615.

Interlaboratory Comparison of UO₂ Dissolution Rates, W. J. Gray, J. C. Tait, S. A. Steward and D. W. Shoesmith, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2597-2601.

Making Sense of a Sensitive Issue, Stan Reid, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p217-223.

Natural Analogues and Performance Assessment, Paul L. Cloke, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1329-1336.

Paper Summary Inventory Assessment of DOE Spent Nuclear Fuels, David G. Abbott, Alan R. Bringhurst and Denzel L. Fillmore, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p320-330.

Preliminary Spent LWR Fuel Oxidation Source Term Model, R. E. Einziger, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p554-559.

Radiation Effects from Uranium Ore Bodies, James O. Duguid, (*High Level Radioactive Waste Management*, High Level Radioactive Waste Program Committee, 1994), p1337-1343.

Repository Criticality Safety for the DOE Spent Nuclear Fuel Program, Dennis Evans and Brian Palmer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p852-859.

Sand Filter Backwast Pit Criticality Analysis, Hans Toffer and David G. Erickson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p907-912.

Systems Modeling for the DOE Spent Nuclear Fuel Program, Dennis Evans, Corey Beebe, Michael Caldwell, Brett Carlsen, Gina Ban, David Van Haaften and Scott Gladson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p331-337.

Thermal Performance of a Depleted Uranium Shielded Storage, Transportation, and Disposal Package, S. D. Wix and H. R. Yoshimura, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p877-881.

U-234/U-238 Ratio: Qualitative Estimate of Groundwater Flow in Rocky Flats Monitoring Wells, J. C. Laul, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2702-2708

Urban areas

Case Study - Performance of Diaphragm Walls During Construction; Predictions vs. Field Measurements, Abdol R. Haghayeghi and Mehrdad Mirzakashani, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p264-270.

CSO Rehabilitation Strategies for Urban Areas, Edward H. Burgess and Larry A. Roesner, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p184-193.

Dam Safety Issues Related to Urban Detention Ponds, James E. Alverson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry

N. Tuvel, ed., 1994), p714-717.

Determinants and Trends in Water Right Market Prices, Ari M. Michelsen, Patrick Person and Robert A. Young, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p165-168.

Estimating Annual Urban Nonpoint Pollutant Loads, Robert D. Chandler, ME Nov./Dec. 94, p50-59.

- Identification of Problems, Solutions, and Cost Savings for Maintenance of Drainageways, Mark R. Hunter, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p194-208.
- Maintenance Management Systems for Urban Drainage, Neil S. Grigg, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p2-10.

MPOS Become VIPS, John Prendergast, CE Apr. 94, p40-43.

Predicting Sediment Yield in Storm-Water Runoff from Urban Areas, Thomas W. Haster and Wesley P. James, WR Sept./Oct. 94, p630-650.

Predicting TCM Responses with Urban Travel - Demand Models, Peter R. Stopher, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p59-75.

Procedures for Evaluating the Effects of Sedimentation on Flood Hazards in Urbanized Areas in the Southwestern U.S. R. A. Mussetter, P. F. Lagasse, M. D. Harvey and C. A. Anderson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p425-428.

Rehabbing Bridges Under Traffic, Rita Robison, CE Apr. 94, p44-47.

Restoration of Lakes and Canals in an Urban Park - Belle Isle, Michigan, Catherine Riseng, Douglas Denison and Bernard Fekete, (Marinas, Parks and Recreation Develpments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p261-270.

Role of Urban Storm-Flow Volume in Local Drainage Problems, Bruce K. Ferguson and Tamas Deak, WR July/Aug. 94, p523-530.

Sewerage Failure, Diagnosis and Rehabilitation, J. W. Delleur, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p11-28.

Source-Receptor Modeling of PAHs Using Deposition Levels in Winter-Long Urban Snowpack, M. Sharma, E. McBean, N. Thomson and J. Marsalek, EE Sept./Oct. 94,

p1248-1265.

Standard Guidelines for the Design of Urban Subsurface Drainage (ANSI/ASCE 12-92) Standard Guidelines for Installation of Urban Subsurface Drainage (ASCE 13-93) Standard Guidelines for Operation and Maintenance of Urban Subsurface Drainage (ASCE 14-93) (St No. 92-012, 93-013, 93-014), American Society of Civil Engineers, 1994, 0-87262-996-1, 60pp. A Stochastic Framework for the Modeling of Failures in Urban Drainage Systems due to Microscale Effects, P. La Barbera, L. Lanza and U. Parodi, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p197-208.

Two-Dimensional Water Flood and Mudflow Simulation, J. S. O'Brien, P. Y. Julien and W. T. Fullerton, HY Feb.

93, p244-261.

Urban Drainage Rehabilitation Programs and Techniques, Edited by William A. Macaitis, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994, 0-7844-0038-5, 223pp.

Urban Versus Rural Risk Perception Relating to High-Level Nuclear Waste, Dennis L. Soden, (High Level Ra-dioactive Waste Management, High Level Radioactive

Waste Program Committee, 1994), p136-141.

Urban development Building the Urban Environment, Candace Port-Hull, WP Spring 94, p41-42.

Community Greenways are Linear Recreationways, Robert D. Espeseth, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p520-525.

Concurrency-Management Practices in Florida: Comparative Assessment, Greg Stuart, UP June 94, p59-73

The Everett, Washington, Water Supply IRP, Dan Mathias, Lloyd Skinner and Lisa Tobin, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p404-407.

Horticultural, Botanical & Environmental Resources, Diane S. Lindsley, (), p534-535.

Linking Linear Greenways To Communities, Brian R. Kliesmet, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p514-519.

Urban planning

Concurrency-Management Practices in Florida: Comparative Assessment, Greg Stuart, UP June 94, p59-73.

Creation of Landowner Compacts for Sustainable Community Development, Brian W. Baetz, UP Dec. 94, p174-182.

Framework and Status of the ASCE Parks & Recreation Planning Guide, Marshall Flug, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p187-195.

Lessons for Effective Urban-Containment and Resource-Land-Preservation Policy, T. Moore and A. C. Nelson,

UP Dec. 94, p157-171.

Menomonee Valley Greenway Feasibility Study, Therese Gripentrog, Wink Hastings and Eduard J. Freer, (Marinas, Parks and Recreation Developments, Marshall Flug,

ed. and Fred A. Klancnik, ed., 1994), p1-6.

Minimum-Impact Modeling of Nonpoint-Source Groundwater Pollution, K. Hatfield, N. Samani and R. Noss, IR

Jan./Feb. 94, p149-167.

MPOS Become VIPS, John Prendergast, CE Apr. 94, p40-

Structuring Category Analysis Using Statistical Technique, V. R. Rengaraju and M. Satyakumar, TE Nov./Dec. 94, p930-939.

Systems-Level Evaluation of Automated Urban Freeways, Robert A. Johnston and Raju Ceerla, TE Nov./Dec. 94, p877-896.

Achieving Adequate BMP's for Stormwater Quality Management, Anne Jones-Lee and G. Fred Lee, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p524-531.

Brackish Groundwater and Urban Runoff: Source of Supply or Source of Problems? William R. Everest and Richard A. Reynolds, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p770-773. General Urban Runoff Model for Water Quality Investiga

tions, Robert E. Pitt, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p1213-1218.

Identification of Problems, Solutions, and Cost Savings for Maintenance of Drainageways, Mark R. Hunter, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p194-208.

Stormwater Regulation: The Local Perspective, Doug Harrison, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme,

ed., 1994), p177-186.

Urban Runoff Based on Land Use and Particle Size, Linda D. Pechacek, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1242-

Why Design Storm Methods Have Become Unethical, William James, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1203-1207.

Urban sprawl

Agricultural Infrastructure for Urban Irrigation, D. Heinert, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p339-342

Lessons for Effective Urban-Containment and Resource-Land-Preservation Policy, T. Moore and A. C. Nelson, UP Dec. 94, p157-171.

Urban transportation
Evaluating Ride-Sharing Programs: Massachusetts' Experience, John Collura, UP Mar. 94, p28-47.

Conservation Measures in Urban Storm Water Manage ment, Hormoz Pazwash and Harry N. Tuvel, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p408-411.

Willingness and Ability to Pay for Rural Water, Jonathan Platt and Steven Piper, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p157-160.

Willingness-to-Pay for Alternative Shortage Probability Distributions, Jay R. Lund, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p521-524.

Utah

The Effect the Central Utah Project Will Have On Water Conservation in Utah, Douglas Gilmore, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p25-28.

Field Evaluation of Concrete Pavement Joint Sealants in Utah, Timothy D. Biel, Hosin Lee, Sherm Hopson and David Eixenberger, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p147-154

Iron and Sand Marge to Treat TCE-Contaminated Water, ET June/July 94, p5.

Optimal Supply of Parking at Airports, Massoud Javid and Prianka N. Seneviratne, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p174-182

Subcontractor's Indemnity is Limited, CE July 94, p24.

Activity Based Costing in Water Resources Management, James P. Heaney and David J. Sample, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p632-636.

Controlling Lead and Copper Corrosion and Sequestering of Iron and Manganese, Jonathan A. Clement, Michael Schock and Darren Lytle, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p1-8.

Demand-Side Solutions Can Save Energy, CE Aug. 94,

The Effects of NOM and Coagulation on Copper Corrosion, John P. Rehring and Marc Edwards, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Marc Edwards, ed., 1994), p26-33. Focus on High-Level Waste Repository Management and Regulation a Rate Regulator's Perspective, Emmit J. George, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1521-1524.

The Implementation of a Comprehensive Water and Wastewater Utility Development Fee Process to Allocate the Cost of New Development to the Beneficiaries, Kenneth M. Needham and Joyce Kinnear, (Revenue Enhancement for Water and Wastewater Systems, Jerry R. Rogers, ed. and William P. Bullock, Jr., ed., 1994), p24-30.

Modeling Issues of Copper Solubility in Drinking Water, Michael R. Schock, Darren A. Lytle and Jonathan A. Clement, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p17-25.

Monitoring of Structures During Repair of Underground Utilities, F. Dirk Heidbrink and John E. Pearson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p258-263.

Overview of Hurricane Andrew in South Florida, Ronald A. Cook, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p70-83.

Pipe Utility Evaluations With the Aid of GIS, Raymond A. Pittman, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p242-246.

Planning and Implementing a Management System for Utility Cuts in City Streets, Rajagopal S. Arudi, Prahlad D. Pant, Andrew Bodocsi and Ahmet E. Aktan, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p764-771.

Revenue Enhancement for Water and Wastewater Systems, Jerry R. Rogers, ed. and William P. Bullock, Jr., ed., 1994, 0-7844-0030-X, 35pp.

Utility theory

Evaluation of Projects for Rehabilitation of Highway Bridges, J. O. Sobanjo, George Stukhart and Ray W. James, ST Jan. 94, p81-99.

Utilization

New and Innovative Repair Technologies (Soil Stabilization and Pot-Hole Repair/Prevention), William A. Mallow, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1097-1102.

Prospects of Vacuum-Assisted Consolidation for Ground OSPECTS OF VACUATION ASSISTED CONSISTENCY OF THE VARIANCE OF T 1994), p90-105.

Vacuum consolidation Technology-Principles and Field Experience, J. M. Cognon, I. Juran and S. Thevanay-agam, (Vertical and Horizontal Deformations of Foun-dations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1237-1248.

Vacuum Design of Welded Steel Pipe Buried in Poor Soil, Reynold K. Watkins and George J. Tupac, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p226-238.

Vacuum-Assisted Consolidation of a Hydraulic Landfill, A. Jacob, S. Thevanayagam and E. Kavazanjian, Jr., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1249-1261.

Estimating Air Conductivity and Porosity from Vadose-Zone Pumping Tests, Joel W. Massmann and Mark Mad-den, EE Mar./Apr. 94, p313-328.

Vadose-Zone Monitoring, Sanitary Treatment Plant Sludge-Drying Beds, Rocky Flats Plant, Golden, Colora-do, James R. Kunkel and J. Scott Thompson, (Water Pol-icy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p359-362.

Validation

About the Range of Validity of Different Spectral Models for Wind-Generated Gravity Waves, Rodríguez R. Germán and Q. José Jiménez, (*Coastal Dynamics '94*, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p755-769.

Kitats, G., 1974, p. 1974.
Calibration and Validation of a Cross-Shore Transport Model, J. Nicholson and B. A. O'Connor, (Coastal Dynamics '94, A. S.-Arcilla, ed., Stev J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p586-598.

Comprehensive Fate Model for Metals in Municipal Wastewater Treatment, Wayne J. Parker, Hugh D. Monteith, John P. Bell, Henryk Melcer and P. Mac Berthouex, EE Sept./Oct. 94, p1266-1283.

Field and Prototype Measurements for Numerical Coastal Modelling, Hans-H. Dette, Jürgen Newe and Yongjun Wu, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p129-142.

Validation of Coastal Morphodynamic Models with Field Data, Helen M. Wallace and Tim J. Chesher, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p114-128.

Validation of Knowledge-Based System with Multiple Bridge Rail Experts, Paul N. Roschke, TE Sept./Oct. 94, p787-806.

Value engineering

Aesthetic Considerations in the Design of a Stack Extension, Howard I. Epstein and George Torello, Jr., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1238-1243.

Constructability Related to TQM, Value Engineering, and Cost/Benefits, Jeffrey S. Russell, Kevin E. Swiggum, Jeffrey M. Shapiro and Achmad F. Alaydrus, CF Feb. 94, p31-45.

Contracting for Tiedback Walls on a Design-Build Basis, Hubert J. Deaton, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p17-23.

Environmental Campus for EPA, Tod Rittenhouse, CE Oct. 94, p54-57.

Partnering for Success, Thomas R. Warne, 1994, 0-87262-976-7, 90pp.

Personal Computer Model to Evaluate Performance of Construction Systems/Services, Dean T. Kashiwagi, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p502-506.

Value Landscape Engineering, Frederick S. Liljegren, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p424-433.

Valve

How to Improve Control of Flow and Reduce Cavitation, Ergun Bakall, Michael T. Stift and Paul W. Johnson, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p89-103.

Laplace Valve Stroking for Complex Piping Systems, Donald Serpas, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p939-943.

Regulation of Flow Downstream of Weirs, Boualem Hadjerioua, Tony Rizk, Emmett M. Laursen and Gary Hauser, HY Mar. 94, p347-360.

Selecting Controls for Water Distribution Systems, J. Paul Tullis, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p43-61.

Use of Hydraulic Control Valves in Deep-Well Pump Station Design Under Low/No Discharge Pressure, Jorge A. Garcia and Les Coffman, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p62-72.

Vapor pressure

Composite Sorption of Pure Vapors on Polyolefins, Carbon, and Minerals, Benito J. Mariñas and Ren-An Li, EE Sept./Oct. 94, p1207-1229.

Variability

Activity Based Costing in Water Resources Management, James P. Heaney and David J. Sample, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p632-636. Constant Time Interval Hortonian Infiltration Model, Jin Lee and Katumi Musiake, IR Mar./Apr. 94, p250-265.
Demand-Driven Operation of Reservoirs Using Uncertainty, Based Optimal Operating Policies Hardomber V.

ty-Based Optimal Operating Policies, Haralambos V. Vasiliadis and Mohammad Karamouz, WR Jan./Feb. 94, p101-114.

Effect of Testing Variability on Contractor Payment for Asphalt Pavements, Serji N. Amirkhanian, James L. Burati, Jr. and Harish C. Mirchandani, CO Sept. 94, p579-592.

Fatigue Lifetime with Load Uncertainty Represented by Convex Model, Yakov Ben-Haim, EM Mar. 94, p445-462.

Hollow Spheres Subjected to Sustained and Variable Loads, Wei Jiang, EM June 94, p1343-1368.

Mulitvariate Geostatistical Design of Ground-Water Monitoring Networks, Fethi Ben-Jemaa, Miguel A. Mariño and Hugo A. Loaiciga, WR July/Aug. 94, p505-522.

Simulation of Correlated Nonstationary Lumber Properties, Frank Lam, Yin-Tang Wang and J. D. Barrett, MT Feb. 94, p34-53.

Single-Degree-of-Freedom Nonlinear Homogeneous Systems, José A. Inaudi, George Leitmann and James M. Kelly, EM July 94, pl 543-1562. A Two-Dimensional Contaminant Transport Model with

A Two-Dimensional Contaminant Transport Model with High-Resolution Upwind Schemes, Dihua Zhao, Jiha Sung Lai and Hsieh Wen Shen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), pl 35-139.

The Variability of Large Alluvial Rivers, Stanley A. Schumm, ed. and Brien R. Winkley, ed., 1994, 0-7844-0054-7, 467pp.

Variability Response Functions of Stochastic Plane Stress/ Strain Problems, Friedrich J. Wall and George Deodatis, EM Sept. 94, p1963-1982.

Variance analysis

Variational Theories in Hydrodynamics and Hydraulics, Chih Ted Yang, HY June 94, p737-756.

Vector analysis

Nonlinear Analysis of Structural Frameworks Using Supercomputing Techniques, Christopher M. Foley and Sriramulu Vinnakota, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p.2058-2065.

Striamulu Vinnatota, (Computing in Civic Engineering, Khalii Khozeimeh, ed., 1994), p2058-2065. Quality Control with Reliability for Large GPS Networks, Alfred Leick and Michael B. Emmons, SU Feb. 94, p25-41.

Reexamination of Convex Polyhedron Outcrossing Problem, Ove Ditlevsen, EM Mar. 94, p654-660.

Vegetation

Development of a Wetland/Riparian Resource Model for the Missouri River System, C. McShane, D. Becker, R. Tressler, J. Cannon and J. Rude, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p746-749.

Floodflow Effects on Riparian Vegetation in Arizona, J. V. Phillips and H. W. Hjalmarson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p707-711.

Flow Capacity through Wide and Submerged Vegetal Channels, M. W. Abdelsalam, A. F. Khattab, A. A. Khalifa and M. F. Bakry, IR. Sept./Oct. 92, p724-732. Guidance for Wetland Restoration with Dredged Material,

Guidance for Wetland Restoration with Dredged Material, Michael R. Palermo and Elba A. Dardeau, Jr., (Dredging '94 F. Clark McNair Ir. ed. 1994), p956-960

'94, E. Clark McNair, Jr., ed., 1994), p956-960.
Late Holocene Climate Derived From Vegetation History and Plant Cellulose Stable Isotope Records From the Great Basin of Western North America, Peter E. Wigand, Martha L. Hemphill and Sikha (Manna) Patra, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2574-2583.

Maximum Surface Storage Provided by Crop Residue, John E. Gilley and Eugene R. Kottwitz, IR Mar./Apr. 94,

p440-449.

Performance Evaluation of Constructed Wetland Treatment System, L. B. Sumrall, R. Y. Surampalli, S. K. Banerji and D. M. Sievers, CR June 94, p35-46.

Pink Sandverbena Recovery Efforts, Eric P. Braun and Thomas Kaye, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1441-1450. Planting of Large-Scale Marsh Projects, Eddie Seidensticker, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p828-832.

Pot-Nets, Delaware, Wetland Habitat and Beneficial Uses of Dredged Material Project, Edward T. Fulford and Robert E. Tunnell, Jr., (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1451-1460.

Sediment Deposition and Entrapment in Vegetated Streambeds, Steven R. Abt, Warren P. Clary and Christopher I. Thornton, IR Nov./Dec. 94, p1098-1111.

Value Landscape Engineering, Frederick S. Liljegren, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p424-433.

Width Adjustment: Relative Dominance in Unstable Alluvial Streams, Andrew Simon, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p974-978.

Vegetative cover

Partitioning of Evapotranspiration Using Lysimeter and Micro Bowen-Ratio Systems, Hossein Ashktorab, W. O. Pruitt and K. T. Paw U, IR Mar./Apr. 94, p450-464.

Vehicle impact forces

Dynamic Behavior of Slant-Legged Rigid Frame Highway Bridge, Ton-Lo Wang, Dongzhou Huang and Mohsen Shahawy, ST Mar. 94, p885-902.

Impact Factors for Simple-Span Highway Girder Bridges, Dongil Chang and Heehyun Lee, ST Mar. 94, p704-715.

Impact of Nuclear Waste Traffic on Highways, Peter E. Sebaaly, Raj Siddharthan and Jon A. Epps, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1255-1262.

Vehicle safety

Test and Evaluation Criteria for Side-Impact Roadside Appurtenance Collisions, M. H. Ray and J. F. Carney, III, TE July/Aug. 94, p633-651.

Vehicle usage

Breakout Session 4A: VMT Estimation, Julian Benjamin, Charles Crevo and Samual Lawton, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), pl 52.

Breakout Session 4B: Speed and Vehicle Mix, Arun Chatterjee, Lawrence Tittemore and Roy Turner, (*Transportation Planning and Air Quality II*, Thomas F. Wholly, ed., 1994), p153.

Vehicles

Computer Vision System for Automatic Vehicle Classification, Xidong Yuan, Yean-Jye Lu and Semaan Sarraf, TE Nov./Dec. 94, p861-876.

Efficient Path Planning Strategies for Unmanned Rover Vehicles, Kevin K. Gifford and George W. Morgenthaler, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1288-1308.

Enabler Chassis Features and Mobility Analysis, James S. Hollinger, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p210-219.

The Engineer Vehicle Tele-operation Capability, David J. Busse and Joseph R. Urda, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p474-480.

Generic Data Acquisition System for Robotic Waste Characterization, John T. Feddema and Barry L. Spletzer, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p320-328.

Goals and Requirements for Scientific Lunar Rovers, Charles Meyer, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p166-174.

An Intelligent Robotic Vehicle for Lunar/Martian Applications, Fei-Yue Wang, Michael Marefat, Paul J. A. Lever and Larry Schooley, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p193-201.

Managing Traffic With Real-Time Transponders, Richard W. Doering, CE Sept. 94, p68-69.

A Mobile Robot for Reconnaissance of HAZMAT Incident Sites, Richard V. Welch, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed. 1994), p269-272.

ed., 1994), p269-277. Navigation of an Autonomous Robot Vehicle, Arturo L. Rankin, David G. Armstrong, II and Carl D. Crane, III, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p44-51.

Onboard Image Processing With Transputers, András Balázs, József Biró and Sándor Szalai, (Engineering, Construction, and Operations in Space IV, Rothey G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1323-1332.

An Overview of the Accident Response Mobile Manipulation System (ARMMS), W. D. Morse, D. R. Hayward, D. P. Jones and A. Sanchez, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p304-310.

Recent Developments in the Robotic All Terrain Lunar Exploration Rover (RATLER) Program, P. R. Klarer, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p202-209.
A Speed Prediction Model for New Zealand Highways,

A Speed Prediction Model for New Zealand Highways, Christopher R. Bennett and Roger C. M. Dunn, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p728-734.

A Stewart Platform Lunar Rover, Roger Bostelman, James Albus, Karl Murphy, Tsung-Ming Tsai and Ed Amatucci, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p175-183.

ct, (*robotics for Challenging Environments*, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p175-183. Three-Dimensional Analysis of Flexible Circular Culverts, Ian D. Moore and Richard W. Brachman, GT Oct. 94, p1829-1844.

Transfer Vehicle Sizing for Missions to Mars, James P. Masciarelli, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1355-1364.

Vertical Pavement Strain as Means of Weighing Vehicles, J. G. Marsh and R. J. Jewell, TE July/Aug. 94, p617-632.

Vehicular traffic

Bridge Rail Impact Forcing Functions, Barry T. Rosson and Ronald K. Faller, (Structures Congress XII, N. C. Baker, ed. and Barry I. London, ed., 1994), p91-96.

Baker, ed. and Barry J. Loodno, ed., 1994), p91-96. California Airpots: Ground Access Vehicle Trips, Emissions and Emission Reduction Strategies, Thomas J. Higgins, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p102-126. Commercial Vehicle Operations and Automatic Vehicle

Commercial Vehicle Operations and Automatic Vehicle Identification Applications at Airports, M. Allen Hoffman and Emily Van Wagner, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p162-173.

Impact of Nuclear Waste Traffic on Highways, Peter E. Sebaaly, Raj Siddharthan and Jon A. Epps, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1255-1262.

Three-Dimensional Dynamic Response of Twin Cavities due to Traveling Loads, F. Guan and I. D. Moore, EM Mar. 94, p637-651.

Vibration of Suspension Bridges Under Vehicular Movement, P. K. Chatterjee, T. K. Datta and C. S. Surana, ST Mar. 94, p681-703.

Velocity

2D Finite Element Modelling of Flooding Due to River Bank Collapse, L. D'Alpaos, A. Defina and B. Matticchio, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p60-71.
Acoustic-Doppler Velocimeter (ADV) for Laboratory Use,

Acoustic-Doppler Velocimeter (ADV) for Laboratory Use, Atle Lohrmann, Ramon Cabrera and Nicholas C. Kraus, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p351-365.

An Alternative Equation for the Mean Velocity in Gravel-Bed Rivers and Mountain Torrents, Dieter Rickenmann, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p672-676.

Bias in Regression Estimates of Manning's n, Kenneth L. Wahl, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p727-731.

Carpet Flow Analysis, Yonas Kinfu and Michael C. Quick, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1161-1165.
Comparison of Current Meters Used for Stream Gaging,

Janice M. Fulford, Kirk G. Thibodeaux and William R. Kaehrle, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p376-385.

Design of Sewers Based on Minimum Velocity, Ismail I.

Esen, EE May/June 93, p591-594.

Effect of Flow Velocity on Sediment Oxygen Demand: Theory, Yoshiyuki Nakamura and Heinz G. Stefan, EE Sept./Oct. 94, p996-1016.

Experimental Study of Debris Flows, Arbind Mainali and Nallamuthu Rajaratnam, HY Jan. 94, p104-123.

Experimental Study on Unsteady Flow in Open Channels with Flood Plains, A. Tominaga, M. Nagao and I. Nezu, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p396-405.

Field Measurements of Secondary Currents in Straight Rivers, Iehisa Nezu, Akihiro Tominaga and Hiroji Naka-

gawa, HY May 93, p598-614.

Furrow Advance-Rate Solution for Stochastic Infiltration Properties, D. Renault and W. W. Wallender, IR May/

June 94, p617-633.

Modeling of Maximum Velocity in Open-Channel Flow, Chao-Lin Chiu and Chairil A. Said, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p381-385.

A New Formula for Mean Velocity in Torrents, Hanspeter Hodel and Isidor Storchenegger, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer,

ed., 1994), p667-671.

A New Set of Equations for Very Shallow Water and Partially Dry Areas Suitable to 2D Numerical Models, A. Defina, L. D'Alpaos and B. Matticchio, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p72-81.

Relation of Unit Gravel Discharge to Mean Velocity, Lilian Posada-G and Carl F. Nordin, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1050-1054.

Reliability Analysis of Open Drainage Channels under Multiple Failure Modes, Said M. Easa, IR Nov./Dec. 94, p1007-1024

Simple Internal Waves and Bores, J. Bühler, HY May 94, p638-645.

Thresholds for Gravel and Cobble Motion, Katherine J. Chase, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p790-

Velocity and Turbulence Measurement from the Illinois and Mississippi Rivers, Ta Wei Soong and Nani G. Bhowmik, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p62-75.

Velocity Control Rings for RC Pipe on Steep Slopes, Glen Drogin, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p928-

Velocity Measurements by the "One-Orange Method", B. A. Christensen, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p76-85.

Velocity Measurements in Asymmetric Turbulent Channel Flows, R. N. Parthasarathy and M. Muste, HY Sept. 94,

p1000-1020.

Velocity Moments on a Macro-Tidal Intermediate Beach, Yolanda L. M. Foote and David A. Huntley, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p794-808.

Velocity of Air-Core Vortices at Hydraulic Intakes, John E. Hite, Jr. and Walter C. Mih, HY Mar. 94, p284-297 Wave-Induced Forces on Armor Unit on Berm Breakwat-

ers, Alf Tørum, WW May/June 94, p251-268.

Velocity distribution

Criteria for Evaluating Flow Classes in Alluvial Channels, Prabhata K. Swamee and Chandra Shekhar P. Ojha, HY May 94, p652-658.

Dynamic Analysis of Unstable Structural Systems With Prescribed Velocities, Ken-ichi Miyazaki, Yasuhiko Hangai and Ken-ichi Kawaguchi, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p239-248.

Energy Loss at Combining Pipe Junction, Marc Serre, A. Jacob Odgaard and Rex A. Elder, HY July 94, p808-

Free-Surface Instability in Flow down Steep Rivers, Cheng-lung Chen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1264.

Generalized Inner Region Velocity Distribution Equation, Prabhata K. Swamee, HY May 93, p651-656.

Laboratory and Field Evaluation of Acoustic Velocity Meters, Tracy Vermeyen, (Fundamentals and Advance-ments in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p43-52.

Methods for Measuring Discharge under Ice Cover, John F. Walker, HY Nov. 94, p1327-1336.

Momentum and Energy Coefficients Based on Power-Law Velocity Profile, Cheng-lung Chen, HY Nov. 92, p1571-1584.

Numerical Modelling and Laboratory Verification for the Turbulent Flow Field in the Branching Channel, Ke-Feng Li, Wen-Qian Zhao, Jia Li and Lin Luo, (*Hydraulic Engineering* '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1295-1299.

Response of Velocity and Turbulence to Abrupt Changes from Smooth to Rough Beds in Open-channel Flows, lehisa Nezu and Akihiro Tominaga, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p195-204.

Stability Principle of Critical Flow Depth in a Moving Coordinate System, Cheng-lung Chen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Ru-

mer, ed., 1994), p1263.

Velocity Distribution in Compound Channel Flows by Nu-merical Modeling, Giuseppe Pezzinga, HY Oct. 94, p1176-1198.

Velocity profile

An Analysis of Flow Velocity Profiles, Stream Bed Roughness, and Resistance to Flow in Natural Gravel Bed Streams, Normand E. Bergeron, (Hydraulic Engineering 94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p692-696.

At-A-Site Mountain River Flow Resistance Variation, James C. Bathurst, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

p682-686.

Developing Air Concentration and Velocity Probes for Measuring Highly-Aerated, High-Velocity Flow, Kathleen H. Frizell, David G. Ehler and Brent W. Mefford, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p268-277

Estimation of Mean Flow Velocity in Ice-Covered Chan nels, Martin J. Teal, Robert Ettema and John F. Walker, HY Dec. 94, p1385-1400.

Estimation of Mean Velocity for Flow Under Ice Cover, Martin J. Teal and Robert Ettema, (Fundamentals and Advancements in Hydraulic Measurements and Experi-

mentation, Clifford A. Pugh, ed., 1994), p242-250 Flow Velocity Profiles in Gravel-Bed Rivers, Vito Ferro and Giorgio Baiamonte, HY Jan. 94, p60-80.

Recent Applications of Acoustic Doppler Current Profilers, K. A. Oberg and David S. Mueller, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p341-350.

Turbulent Structure of Water and Clay Suspensions with Bed Load, Zhaoyin Wang and Peter Larsen, HY May 94,

p577-600.

Turbulent Velocities in a Mountain River, Graeme M. Smart, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p844-

Ventilation

An Auxiliary Ventilation Design Approach for the ESF Development at Yucca Mountain, P. Mousset-Jones and F. Calizaya, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p508-514.

Central Artery Vent Shaft Will Come Wrapped, CE May

94, p25,27 Combatting 'Sick Building Syndrome', CE Jan. 94, p20-21.

Computer Based Energy Analysis for Mechanical Retrofit of Buildings, Joseph Staib, Matt Syal and David Peters, (Computing in Civil Engineering, Khalil Khozeimeh,

ed., 1994), p1349-1356.

Experimental Heat Transfer and Fluid Flow Over Drift-Emplaced Canisters, William G. Culbreth and Satish Pat-tisam, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p772-779.

Ventilation Considerations for Repository Subsurface Advanced Conceptual Design, Hang Yang and Kalyan K. Bhattacharyya, (High Level Radioactive Waste Manage-ment, High Level Radioactive Waste Program Committee, 1994), p530-537.

Vermont

Bridging a Gap to the Yankee Past, CE July 94, p12-13.

Vertical angles

Representation of Vertical Constraints Knowledge for Scheduling Multi-Story Projects, Walid Y. Thabet and Yvan Beliveau, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p349-355.

Consolidation of Ground Reclaimed by Inhomogeneous Clay, Hiroyuki Tanaka, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1262-1273.

Equivalent Diameter of Vertical Drains With an Oblons Cross Section, Richard P. Long and Alvaro Covo, GT Sept. 94, p1625-1630.

Finite Strain Consolidation for Vertical Drains, R. Robert Goughnour, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p688-700.
Performance of Embankment Stabilized with Vertical

Drains on Soft Clay, B. Indraratna, A. S. Balasubramani-

am and P. Ratnayake. GT Feb. 94, p257-273.

Settlement of Test Fills for Chek Lap Kok Airport, Dominic O. Kwan Lo and Gholamreza Mesri, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1082-1099.

Ultimate Settlement by Hyperbolic Plot for Clays with Vertical Drains, Siew-Ann Tan, GT May 93, p950-956.

Vertical loads

Column Design in Steel Frames under Gravity Loads,

Oscar de Buen, ST Oct. 92, p2928-2935

Experimental Study of the Settlement of Shallow Foundations, Samuel Amar, François Baguelin, Yves Canépa and Roger Frank, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1602-1610.

Prediction of Vertical Load on Spread Foundations at Small and large Deflections, Richard J. Deschamps and Scott J. Ludlow, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p202-205.

Strength-Ratio Based Assessment of Wood Structures, Jozsef Bodig and Loren D. Flick, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p677-684.

Viaducts

Developing Retrofit Strategies for the China Basin Viaduct Foundations Using Non-linear, Hysteretic Analysis, D. R. Parker, John C. Castro and R. A. Dameron, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1839-1845.

V. Brizick, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p302-307.

Road to Recovery, Ray Zelinski, CE Apr. 94, p36-39.

Viaduct Re-Created in its Own Image, CE Feb. 94, p20-21.

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Analysis of Free Vibrations of Tall Buildings, Qiusheng Li, Hong Cao and Guiqing Li, EM Sept. 94, p1861-1876

An Application of a Coulomb Damped Mass Device, Apostolos Fafitis and Debra S. Larson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p399-404.

Axisymmetric Vibrations of Thick-Walled Cylindrical Tubes in the Presence of Thermal Residual Stresses, Victor Birman, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p257-265.

Buckling and Vibration Analysis of Laminated Panels Using VICONOPT, David Kennedy, Fred W. Williams and Melvin S. Anderson, AS July 94, p245-262.

Comparison of Simple and Chebychev Polynomials in Rayleigh-Ritz Analysis, Sarvesh Singhvi and Rakesh K. Kapania, EM Oct. 94, p2126-2135.

Computer Model Pointing to Dynamic Instability of Lift Slab Structure, Rusk Masih, (Computing in Civil Engi-neering, Khalil Khozeimeh, ed., 1994), p1832-1838.

Coupling Translation and Rocking Motions, J. P. Lee and J. A. Bohinsky, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p61-66.

Criteria for Acceptable Wind-Induced Motions, Nicholas Isyumov, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p642-647.

Damping Systems for Controlling Wind Induced Motions of Structures, Ahsan Kareem and Yukio Tamura, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p845-850.

Effect of Initial Curvature on Natural Frequency of Thin Plate on Hinge Supports, Qiulin Yu, Naser Mostaghel and Kuan-Chen Fu, EM Apr. 94, p796-813.

Effects of Multiple Modes on Rayleigh Wave Dispersion Characteristics, Kohji Tokimatsu, Shuji Tamura and Hisaya Kojima, GT Oct. 92, p1529-1543.

Evaluation of Wood Floor Vibration Design Criteria, R. E. Kalkert and J. D. Dolan, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p520-525.

First-Passage Time of Secondary System Mounted on Yielding Structure, David C. K. Chen and Loren D. Lutes, EM Apr. 94, p814-834.

Forces on Vibrating Cylinder Near Wall in Current and Waves, B. M. Sumer, J. Fredsøe, B. L. Jensen and N. Christiansen, WW May/June 94, p233-250.

Free Vibrations of Laminated Anisotropic Cylindrical Shells, P. R. Heyliger and A. Jilani, EM May 93, p1062-1077.

Free-Vibration Analysis of Point-Supported Orthotropic Plates, D. J. Gorman, EM Jan. 94, p58-74.

Guidelines to Minimize Floor Vibrations from Building Occupants, Sarah E. Mouring and Bruce R. Ellingwood, ST Feb. 94, p507-526.

Impact of Weight Falling onto the Ground, Jose M. Roesset, Eduardo Kausel, Vicente Cuellar, Jose L. Monte and Julian Valerio, GT Aug. 94, p1394-1412.

Modal Interaction in the Response of Laminates, Jamal F. Nayfeh, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p89-98.

Multi-mode Aerodynamic Analysis of Long-Span Bridges, Nicholas P. Jones, Anurag, Jain and Robert H. Scanlan, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p894-899.

Non-Intrusive Experimental Setup for Inflatable Dam Models, T. A. Economides and D. A. Walker, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p500-508.

Prestress Force Effect on Vibration Frequency of Concrete Bridges, M. Saiidi, B. Douglas and S. Feng, ST July 94, p2233-2241.

Probabilistic Evaluation of Human Perception Threshold of Horizontal Vibration of Buildings (0.125Hz to 6.0Hz), Jun Kanda, Yukio Tamura, Kunio Fujii, Tamio Ohtsuki, Kiyoto Shioya and Shinji Nakata, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p648-653.

Role of Vortex-Excited Vibrations in Damage to Power Poles in Hurricane Andrew, Richard A. Skop and Ahmad H. Namini, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed.

and Mehrdad Sotani, ed., 1994), p567-576.
Semiactive Motion Control Using Variable Stiffness, David
C. Nemin, Yingjie Lin and Roberto A. Osegueda, ST

Apr. 94, p1291-1306.

SemiActive Structural Control: A Low Cost Fix for An Infrastructure at Risk, C. C. Kuo, H. Wu, L. Liu, R.L. Sack, A. Ebrahimpour and W. N. Patten, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p387-392.

Shear Effects on the Free Vibrations of Coupled Shear Walls, G. Q. Li and B. S. Choo, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1727-1734. Simulation of Multi-Dimensional, Anisotropic Ground Motions, O. Ramadan and M. Novak, EM Aug. 94, p1773-

Stability of Lift Slab Structure During Construction Stage, Rusk Masih, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p271-277.

Three-Dimensional Dynamic Response of Twin Cavities due to Traveling Loads, F. Guan and I. D. Moore, EM Mar. 94, p637-651.

Three-Dimensional Solutions for Initially Stressed Struc-tural Sandwiches, Ahmed K. Noor, Jeanne M. Peters and W. Scott Burton, EM Feb. 94, p284-303.

The Use of Piezoelectric Film in Cavitation Research, Saurav Paul, Christopher R. Ellis and Roger E. A. Arndt, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p454-471.

Vibration Characteristics of Suspension Membrane Structures, Norio Masaoka, Kazuo Ishii and Ryo Muranaka, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p732-741.

Vibration of Mindlin Plates on Point Supports Using Constraint Functions, K. M. Liew, Y. Xiang, S. Kitipornchai and M. K. Lim, EM Mar. 94, p499-513.

Vibratory Extraction of Clay Fines from Subsurface, Lakshmi N. Reddi, A. Hadim, R. N. Prabhushankar and F. Shah, EE Nov./Dec. 94, p1544-1558.

Vibratory Mobilization of Immiscible Liquid Ganglia in Sands, Lakshmi N. Reddi and Sreedhar Challa, EE Sept./Oct. 94, p1170-1190.

Vibration analysis

3-D Dynamic Analysis of the Brent-Spence Through-Truss Bridge, I. E. Harik, D. L. Allen, R. L. Street, M. Guo, R. C. Graves, J. Harison and M. J. Gawry, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1112-1117.

Analysis of Free Vibrations of Tall Buildings, Qiusheng Li, Hong Cao and Guiqing Li, EM Sept. 94, p1861-1876. Application of Neural Networks in Vibrational Signature

Analysis, M. F. Elkordy, K. C. Chang and G. C. Lee, EM Feb. 94, p250-265.

Cross-Flow Vibrations of Cylinder in Irregular Oscillatory Flow, Andrzej Kozakiewicz, B. Mutlu Sumer and Jørgen Fredsøe, WW Nov./Dec. 94, p515-534.

Displacement of Landmark Building Resulting from Adja-cent Construction Activities, Jacek K. Leznicki, Robert G. Gaibrois and Melvin I. Esrig, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p222-232

Dynamic Behavior of Slant-Legged Rigid Frame Highway Bridge, Ton-Lo Wang, Dongzhou Huang and Mohsen Shahawy, ST Mar. 94, p885-902.

Dynamic Characteristics of Translational Lattice Domes, Celina U. Penalba, (Spatial, Lattice and Tension Struc-tures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p269-279.

Equations for Tapered Thin-Walled Beams of Generic Open Section, Sundaramoorthy Rajasekaran, EM Aug. 94, p1607-1629.

Free-Vibration Analysis of Tank Containing Two Liquids, Yu Tang, EM Mar. 94, p618-636.

Impact Factors for Simple-Span Highway Girder Bridges, Dongil Chang and Heehyun Lee, ST Mar. 94, p704-715.

Nonlinear Vibration Analysis of Steel Frames with Semirigid Connections, Siu Lai Chan and Goman Wai Ming Ho, ST Apr. 94, p1075-1087.

Vibration control

Akashi-Kaikyo Bridge Underconstruction, Fumio Nishino, Takeo Endo and Shin Kitagawa, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p779-780. Characterization of an ER Active Member, Henri P. Gavin

Chataccertzauon of an EN Active Member, Henn P. Gavin and Robert D. Hanson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p863-868. Constitutive Model for Viscoelastic-Fluid Dampers, Nicos Makris, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p857-862.

Dynamic Optimization by Small Variation of the System Layout, Zdzisław A. Parszewski, (Engineering, Construction, and Operations in Space IV, Rodney G. loway, ed. and Stanley Lokaj, ed., 1994), p1492-1503.

Modal Filter Based Structural Control of a Highway Bridge, S. J. Shelley, E. A. Aktan and K. L. Lee, (Analysis and Computation, Franklin Y. Cheng, ed., 1994),

p347-356.

Practical Application of Tuned Liquid Damper for Tall Buildings, Toshihiro Wakahara, Kenji Shimada and Yukio Tamura, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p851-856.

Wind Effects and Countermeasures During Erection of a Cable-stayed Bridge, S. G. Arzoumanidis, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p881-886.

Vibration damping
Estimation of Structural Damping of Buildings, Yukio
Tamura, Masaaki Yamada and Haruhiko Yokota, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1012-1017.

Practical Application of Tuned Liquid Damper for Tall Buildings, Toshihiro Wakahara, Kenji Shimada and Yukio Tamura, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p851-856.

A Smoother Ride to Vibration Damping, CE May 94, p13-

Vibration effects
Performance of Wick Drains Installed by Vibration,
Richard P. Long, Leo F. Fontaine and Bruce Olmstead,
(Vertical and Horizontal Deformations of Foundations) and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1193-1201.

Prediction of Low Level Vibration Induced Settlement, Dong-Soo Kim, Sergey Drabkin, Anatoly Rokhvarger and Debra Laefer, (Vertical and Horizontal Deforma-tions of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p806-817.

Vibration Induced Settlement From Blast Densification and Pile Driving, Charles H. Dowding, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1672-1688.

Vibration measurement

Modal Identification of Cable-Stayed Pedestrian Bridge, Mack G. Gardner-Morse and Dryver R. Huston, ST Nov. 93, p3384-3404.

Vibration response

A Piezoelectric Sediment Density Probe, I. R. McDermott, A. D. King and S. J. Smyth, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p239-248.

Vibration tests

Vibration Testing for Nondestructive Evaluation of Bridg-

es. I: Theory, Mahmod M. Samman and Mrinmay Biswas, ST Jan. 94, p269-289. Vibration Testing for Nondestructive Evaluation of Bridges. II: Results, Mahmod M. Samman and Mrinmay Biswas, ST Jan. 94, p290-306.

Vibratory compactors Compaction of Lunar-Type Soil, Leonhard E. Bernold, AS

Apr. 94, p175-187.

A Comparison of Three Soil Improvement Techniques to Densify Liquefaction Susceptible Sands, Alec D. Smith and Edward B. Kinner, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1224-1236.

Vibratory pile driving

Displacement of Landmark Building Resulting from Adjacent Construction Activities, Jacek K. Leznicki, Robert G. Gaibrois and Melvin I. Esrig, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p222-

Videotape

Development of a Visual Method to Track the Movement of Hydrogen Bubbles in a Laboratory Flume, Athanasios N. Papanicolaou and Panayiotis Diplas, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p205-212. High-speed Video Analysis of Sediment-Turbulence Inter-

action, Yarko Niño, Fabián López and Marcelo García, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed.,

1994), p213-222.

Interceptor Inspection and Rehabilitation Program, William A. Macaitis and Amreek Paintal, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p123-142. Let's Go to the Videotape, Paul Tarricone, CE June 94,

p42-45.

Model-Prototype Conformance of a Submerged Vortex in the Intake of a Vertical Turbine Pump, K. Warren Frizell, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p482-489.

Multimedia in Civil Engineering, Jorge A. Vanegas and Nelson C. Baker, CE May 94, p71-73.

A Multimedia Learning Environment for Statics, Siegfried M. Holzer and Raul H. Andruet, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), Simple Procedure for Identifying Pavement Distresses from

Video Images, Koon Meng Chua and Ling Xu, TE May/June 94, p412-431.

Simultaneous Flow Visualization and Hot-Film Measurements, Fabián López, Yarko Niño and Marcelo García, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p490-499

Video-Based Data System Keeps Traffic Moving, ET Oct./

Nov. 94, p1,4-5.

Vietnam

Ho Chi Minh beachheads, WP Spring 94, p2.

More on Mexico, Vietnam, WP Spring 94, p4. Venue: Vietnam, WP Special issue 94, p5.

Vietnam: Firsthand Feedback, Virginia Fairweather, WP Spring 94, p9-12.

Vietnam: Taming the Tiger, Irwin Jay Robinson, WP Spring 94, p6-8. Vietnamese Market Opens to U. S. Firms, CE Apr. 94, p8.

Virginia

Demand-Side Solutions Can Save Energy, CE Aug. 94,

Historic Yorktown: New Bridge Keeps Old Design, Mi-chael J. Abrahams, CE Nov. 94, p46-47.

The Management of Dredged Material Placement for the Development of Oyster Rock on the Eastern Shore of Virginia, Walter I. Priest, III, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p394-398. Pentagon to Undergo Billion-Dollar Rehab, CE May 94,

p11-12.

Start-ups, CE May 94, p8. Start-ups, CE Oct. 94, p8.

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Viscoelasticity
Applications of Viscoelastic Dampers to High-Rise Buildings, C. S. Tsai and H. H. Lee, ST Apr. 93, p1222-1233.
Constitutive Model for Viscoelastic-Fluid Dampers, Nicos

Makris, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p857-862.

Energy-Based Failure Criterion for Wood, Timothy A Philpot, Kenneth J. Fridley and David V. Rosowsky, MT

Nov. 94, p578-594.

How Do Geosynthetics Improve Pavement's Performance, Imad L. Al-Qadi, Thomas L. Brandon, Timothy E. Smith and Bruce A. Lacina, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p606-616.

Implementation of a Viscoplastic, Kinematic Hardening Constitutive Model for Impact Prediction, Jeffrey R. Sachs, Charles S. White and Frederick C. Taverner, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p388-401.

Lateral Cyclic Response of Pile in Viscoelastic Winkler Subgrade, Shintaro Yao and Toyoaki Nogami, EM Apr.

94, p758-775.

Modeling Viscoelastic Behavior of Hot Mix Asphalt (HMA) Using Discrete Element Methods, Jay Namunu Meegoda and K. George Chang, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p804-811.

Rate Dependent Plasticity and Damage for Concrete, V. P. Panoskaltsis, J. Lubliner and P. J. M. Monteiro, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p27-

Structural System Changes by Means of Forcedly Applied Restraints, Angelo Marcello Tarantino, EM Feb. 94,

Temperature Effect of Viscoelastic Dampers during Earthquakes, C. S. Tsai, ST Feb. 94, p394-409.

Utilizing Visco-Elastic Dampers in the Seismic Retrofit of a Thirteen Story Steel Framed Building, Patrick Crosby, James Kelly and J. P. Singh, (Structures Congress XII, Baker, ed. and Barry J. Loodno, ed., 1994), p1286-1291.

Wave Interaction with Fluid Mud in Rectangular Trench, Francis C. K. Ting, WW Mar./Apr. 94, p154-178.

Application of the "Diflupress L.D." Field Test to Settlement Calculation, C. Leidwanger, E. Flavigny, R. Chambon, J. L. Giafferi, P. Catel and G. Bufi, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1312-1324.

Nonlinear Lateral, Rocking, and Torsional Vibration of Rigid Foundations, Ronaldo I. Borja, Wen-Hwa Wu, Alexander P. Amies and H. Allison Smith, GT Mar. 94,

p491-513.

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Advanced Continuum Traffic Flow Models for Congested Freeways, Anastasios S. Lyrintzis, Ping Yi, Panos G. Michalopoulos and Dimitrios E. Beskos, TE May/June 94, p461-477.

Determining Bituminous Pavement Shear Modulus, John E. Haddock and Thomas D. White, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p788-795.

Generalized Inner Region Velocity Distribution Equation, Prabhata K. Swamee, HY May 93, p651-656.

Effect of Restriction of Vision on Driving Performance, Rod Troutbeck and Joanne M. Wood, TE Sept./Oct. 94, p737-752.

Warning System Will Report Low Visibility to Drivers, ET Dec. 94/Jan. 95, p7.

Construction Kit for Visual Programming of River-Basin Models, René F. Reitsma, Andrew M. Sautins and Stephen C. Wehrend, CP July 94, p378-384.

Let's Go to the Videotape, Paul Tarricone, CE June 94,

Robotic Workcell for Waste Handling, Gregory P. Starr, Gregory W. Donohoe, David Wilson and Raghu Kopalle, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p347-355.

Visual perception

Aesthetic Issues in Timber Bridges, Frederick M. Law, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1268-1273.

The Body Language of Tensile Structures, Todd Dalland, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p990-999.

Real-time Motion Vision for Robot Control in Unstructured Environments, John Woodfill, Ramin Zabih and Oussama Khatib, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), pl0-18.

Void ratio

Effect of Heat Treatment on Strength of Clays, R. C. Joshi, Gopal Achari, D. Horsfield and T. S. Nagaraj, GT June 94, p1080-1088.

One-Dimensional High-Pressure Compression of Granular Media, M. M. Hagerty, D. R. Hite, C. R. Ullrich and D. J. Hagerty, GT Jan. 93, p1-18.

Permeability Behavior of a Water Treatment Sludge, M. C. Wang and W. Tseng, GT Oct. 93, p1672-1677.

Voide

Alabama DOT Implementation of Hot Mix Asphalt QC/QA Procedures, Frazier Parker, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1026-1033.

Densification of Asphalt Pavements by Traffic, Charles R. Foster, (Airport Pavement Innovations—Theory to Practice, Jim W. Hall, Jr., ed., 1993), p164-180.

Understanding the Modes of Failure for Sewers, Robert F. Serpente, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p86-100.

Void Fraction Measurement Techniques for Gas-Liquid Bubbly Flows in Closed Conduits; A Literature Review, Mahmood Naghash, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p278-288.

Void Mortar Joints: Bane of Brick Masonry, Clayford T. Grimm, CO Mar. 94, p152-161.

Volatile organic chemicals

Air Permeability from Pneumatic Tests in Oxidized Till, Kenneth B. Edwards and LaDon C. Jones, EE Mar/Apr. 94, p329-347.

Benzene Transport Through Landfill Liners Containing Organophilic Bentonite, James A. Smith and Peter R. Jaffé, EE Nov./Dec. 94, p1559-1577.

Control of Odor and VOC Emissions at Wastewater Treatment Plants - Boston Harbor Case Study-, Robert Getter, Cheryl Breen and Mark Laquidara, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p548-555.

Destruction of Gas Phase TCE Using a Plasma Reactor, Ho-Sik Yoo, John N. Veenstra, Ven-Yen Tsai and Arland H. Johannes, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p585-592.

Effect of HRT on Acidogenic Digestion of Primary Sludge, P. Elefsiniotis and W. K. Oldham, EE May/June 94, p645-660.

Emissions, Ambient Concentrations, and Potential Health Hazards of VOCs from Wastewater Treatment, Jin-Sheng Lin and Lynn M. Hildemann, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p580-584. An Evaluation of the Impact of Recent Flooding on the Operation of a Groundwater Extraction and Treatment System at a Superfund Site, Kerry L. Gavett, Michael J. Fiore and Eric J. Meyer, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p764-771.

How Can a Radioactive Waste Disposal Facility Achieve Compliance with RCRA? Ruth F. Weiner, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1525-1531.

In Situ Treatment of VOCs by Recirculation Technologies, O. F. Webb, R. L. Siegrist, M. R. Ally, W. E. Sanford, P. M. Kearl and J. L. Zutman, (*Critical Issues in Water and Wastewater Treatment*, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p572-579.

Modeling Volatile Organic Contaminants' Fate in Wastewater Treatment Plants, H. Melcer, J. P. Bell, D. J. Thompson, C. M. Yendt, J. Kemp and P. Steel, EE May/ June 94, p588-609.

Off-Gas Recycle for VOC Emission Control: Conceptual Model, Yerachmiel Argaman and Jack L. Musterman, EE May/June 94, p573-587.

The Performance of Unconfined Hollow Fiber Membranes as Pipe Flow and Mixed Flow Aerators, Drew W. Johnson and Michael J. Semmens, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p106-113.

Plate and Frame Membrane Air Stripping, Stephen T. Boswell and David A. Vaccari, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p726-729.

A Probability Based Approach to the Design and Operation of Soil Vapor Extraction Systems, Kenneth K. Kebbell and William F. McTernan, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), 564–571.

Quantification of the Mechanisms Controlling the Removal Rate of Volatile Contaminants by Air Sparging, Gretchen L. Hein, Neil J. Hutzler and John S. Gierke, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p556-563.

Volatilization of Selected Organic Compounds from Quiescent Water, Jian Peng, Jatinder K. Bewtra and Nihar Biswas, EE May/June 94, p662-669.

Volatilization

Emissions, Ambient Concentrations, and Potential Health Hazards of VOCs from Wastewater Treatment, Jin-Sheng Lin and Lynn M. Hildemann, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p580-584.

Volatilization of Selected Organic Compounds from Quiescent Water, Jian Peng, Jatinder K. Bewtra and Nihar Biswas, EE May/June 94, p662-669.

Volcanic ash

Above and Below Boiling Thermal Loading Strategies for Large Waste Packages, Marvin L. Smith, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2146-2151.

Analysis of Flow Along Anisotropic Fractures in Partially Saturated Media, J. S. Y. Wang and B. L. Cox, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1915-1921

Electrical Properties of Topopah Spring Tuff as a Function of Saturation, Jeffery J. Roberts and Wunan Lin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2112-2120.

Fracture-Matrix Interaction in Topopah Spring Tuff: Experiment and Numerical Analysis, Robert J. Glass, Vince C. Tidwell, Alan L. Flint, William Peplinski and Yvette Castro, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1905-1914.

Hydrologic Property Alterations Due to Elevated Temperatures at Yucca Mountain, A. L. Flint, M. H. Nash and M. S. Nash, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p.2101-2105. Li, Qizhi, Richard A. Schultz, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2106-2111.

Mechanical and Bulk Properties in Support of ESF Design Issues, R. H. Price, R. J. Martin, III, P. J. Boyd and J. S. Noel, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1987-1992.

Modeling Infiltration Into a Tuff Matrix From a Saturated Vertical Fracture, Clifford K. Ho, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1897-1904.

Observations of Water Movement in a Block of Fractured Welded Tuff, Falah Thamir, Edward M. Kwicklis, David Hampson and Steve Anderton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2020-2029.

Results of Air-Permeability Testing in a Vertical Borehole at Yucca Mountain, Nevada, G. D. LeCain and J.N. Walker, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p2782-2788.

Saturation Levels and Trends in the Unsaturated Zone, Yucca Mountain, Nevada, Philip H. Nelson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2774-2781.

Scaling Behavior of Gas Permeability Measurements in Volcanic Tuffs, Vincent C. Tidwell, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2500-2509.

Selenite Transport in Unsaturated Tuff From Yucca Moun-tain, James L. Conca and Ines R. Triay, (High Level Ra-dioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2175-2182.

Analysis of the Torrent Lava Flow Movement and Its Computations - One Example Applied Investigation of Disastrous Torrent Flood, Zoran Gavrilović, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p650-651.

Evidence for a Welded Tuff in the Rhyolite of Calico Hills, Robert P. Dickerson and W. Clay Hunter, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1861-1868.

Late Cenozoic Evolution of Fortymile Wash: Major Change in Drainage Pattern in the Yucca Mountain, Nevada Region During Late Miocene Volcanism, Scott C. Lundstrom and Richard G. Warren, (High Level Radio-active Waste Management, High Level Radio-waste Program Committee, 1994), p2121-2130.

Terrestrial Analogs: Implications for Lunar Lava Tubes, Cassandra R. Coombs and B. Ray Hawke, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1138-

Volume change

An Alternative Formulation of Volume-change Behavior of Soils, Sunirmal Banerjee and Kandiah Sribalaskandarajah, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p652-662.

Swell versus Saturation for Compacted Clay, Robert W. Day, GT Aug. 92, p1272-1278.

Volume measure

Correct Form of Hall Technique for Border Irrigation Advance, A. Al-Azba and T. Strelkoff, IR Mar./Apr. 94, p292-307.

Finite-Element Volumes, Thomas G. Davis, SU Aug. 94, p94-114.

Partnering in Environmental Restoration: The Coastal America Model, William L. Klesch, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p449-452.

Vortex shedding

Vortex Convection Produced by V-Shaped Dihedral Obstruction, Takashi Asaeda, Pham Hong Son and Steven Armfield, HY Nov. 94, p1274-1291.

Vortices

Bridge Pier Scour Equations - An Assessment, Alimul Qadar and Sarfaraz A. Ansari, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p61-67.

Distribution of Suspended Sediment over Wave-Generated Ripples, Erik Asp Hansen, Jørgen Fredsøe and Rolf Deigaard, WW Jan./Feb. 94, p37-55.

Laboratory Experiment of Longshore Bars Produced by Breaker-Induced Vortex Action, Da Ping Zhang, Tsuguo Sunamura, Shigenobu Tanaka and Koji Yamamoto, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p29-43.

Model-Prototype Conformance of a Submerged Vortex in

the Intake of a Vertical Turbine Pump, K. Warren Frizell, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh,

ed., 1994), p482-489.

Random Vortex Models in Wind Engineering, George Turkiyyah, Dorothy Reed and Jiyao Yang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p99-106.

Role of Vortex-Excited Vibrations in Damage to Power Poles in Hurricane Andrew, Richard A. Skop and Ah-mad H. Namini, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p567-576.

Velocity of Air-Core Vortices at Hydraulic Intakes, John E. Hite, Jr. and Walter C. Mih, HY Mar. 94, p284-297.

Wade, Larry R. Charles A. Parthum Is 1994 Nominee for ASCE President-Elect, NE July 94, p3.

Wages

Unsuccessful Bidder Succeeds on Wage Issue, CE July 94, p24-25.

Walkways Elevated Walkways Rise Above Impact on Environment, CE Aug. 94, p78

Redesigning Suburbia for Walking and Transit: Emerging Concepts, Farhad Atash, UP Mar. 94, p48-57.

Accurate Estimation of Interface Shear Stresses in Composite Masonry Walls, Subhash C. Anand and M. Ayubur Rahman, ST Mar. 94, p998-1015.

Composite Walls as Shear Elements in Tall Structures, Howard Wright, Anwar Hossain and Stewart Gallocher, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p140-145.

Computer-Assisted Design of Hollow Concrete Masonry Computer-Assisted Design of Frollow Conference Anasonay Bearing Walls, Kathleen M. Bradley and Terence A. Weigel, (Computing in Civil Engineering, Khalil Kahozeimeh, ed., 1994), p1703-1710. Failure of Residential Building Envelopes as a Result of Hurricane Andrew in Dade County, Florida, Clifford Ol-

iver and Chris Hanson, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p396-508.

Failures and Failure Mechanisms for Exterior Walls, Gene S. Sanders, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and

Mehrdad Sotani, ed., 1994), p509-518.

Floor to Wall Anchors in Historic Brick Buildings, W. Bradford Cross and Nicholas P. Jones, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1569.

Improved Wide-Column-Frame Analogy for Shear/Core Wall Analysis, A. K. H. Kwan, ST Feb. 93, p420-437. Influence of Membrane Forces on Transverse-Shear Rein-forcement Design, Perry Adebar and Weishi He, ST Apr. 94, p1347-1366.

King Harbor Mole Repair Redondo Beach, California, Clark B. Adams, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p283-291.

Moisture Migration through Basement Walls, Robert W. Day, CF Feb. 94, p82-86.

Nonlinear Finite-Element Model for Light-Frame Stud Walls, B. Kasal and R. J. Leichti, ST Nov. 92, p3122-

Predicted Behavior of Two Centrifugal Model Soil Walls, See Keung Ho and R. Kerry Rowe, GT Oct. 94, p1845-1873

Recent Developments in Seismic Response of Composite Structures, Bahram M. Shahrooz, David A. Kramer and Mark E. Remmetter, (Structures Congress XII, N. C.

Baker, ed. and Barry J. Loodno, ed., 1994, p158-163.
Seismic Design of RC Structural Walls with Unsymmetrical Cross-Sections, John W. Wallace and Sharon L.
Wood, (Structures Congress XII, N. C. Baker, ed. and

Barry J. Loodno, ed., 1994), p43-48. Seismic Strengthening of URM Buildings with Steel Bracing, Durgesh C. Rai, Subhash C. Goel and William T. Holmes, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p809-814.

Shock-Wave Reduction by Bottom Drop, Markus Schwalt and Willi H. Hager, HY Oct. 94, p1222-1227.

Soil Mix Walls in Difficult Ground, David S. Yang and Shigeru Takeshima, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p106-120.

Soil Nailing Saves Distressed Timber Wall, James Harms-

ton and Gary W. Rhodes, (Serviceability of Earth Re-taining Structures, Richard J. Finno, ed., 1994), p130-136.

Spacecraft Wall Design for Orbital Debris Impact, Shyh-Rong Tzan and Chris P. Pantelides, (Engineering, Con-

struction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p378-387. Testing of Hollow Clay Tile Masonry Prisms, W. D. Jones and M. B. Butala, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1094-1099.

Working Stress Design Method for Reinforced Soil Walls. Mauricio Ehrlich and James K. Mitchell, GT Apr. 94, p625-645

Ward, Joseph S.

Joseph Ward, Past President of ASCE, Dies at 68, NE Feb. 94, p10.

Warehouses

Seismic Response of Concrete Tilt-Up Systems, Sharon L. Wood and Neil M. Hawkins, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1484-1489.

Warpage

A Self-Balancing Laminate, Jozsef Bodig, Robert T. Brooks and Allan G. Burk, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p689-

Warping Stresses in Concrete Pavements on Pasternak Foundation, X. P. Shi, T. F. Fwa and S. A. Tan, TE Nov./Dec. 93, p905-913.

Washing

Soil Washing oil Washing and Biotreatment of Petroleum-Contaminated Soils, Alok Bhandari, Dennis C. Dove and John T. Novak, EE Sept./Oct. 94, p1151-1169.

/ashing of Bentonite in Laboratory Hydraulic-Conductivity Tests, Denis Marcotte, Jean Claude Marron and Marcel Fafard, EE May/June 94, p691-698.

Critical and Supercritical Flows in two Unstable, Mountain Rivers, Toutle River System, Washington, Andrew Simon and J. H. Hardison, III, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p741-745.

Hanford B Reactor, Now a Half-Century Old, Is ASCE Landmark, NE May 94, p16.

No Registration, No Arbitration, CE Nov. 94, p26.

Retrofitting a Regional Stormwater Facility, Richard L. Schaefer, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p209-219.

Start-ups, CE Apr. 94, p8

Subcontractor Held to Dispute Resolution, CE Aug. 94, p24.

Washington State DOT Picks Privatization Projects, CE Nov. 94, p11.

Wastewater is No Waste if It's Reused, CE Dec. 94, p14.

Washington, D.C.

Airport Terminal Design Challenges, Daniel J. Feil, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p18-25.

Demand-Side Solutions Can Save Energy, CE Aug. 94, p18.

Dulles International Airport Construction Challenges, Christopher P. Hinker, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p26-29.

Foundation Set Up to Aid ASCE's Relocation to Washington Area; Deane Named Its President, NE Sept. 94, pl.

The Future of the Past: Historic Preservation at the Metropolitan Washington Airports, H. Henry Ward, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p8-17.

Getting the Project Started, Daniel G. Hacker, (Aviation Crossroads: Challenges in a Changing World, William

J. Sproule, ed., 1994), p1-7.

Long-Term Maintenance Plan for Vietnam Memorial, CE Oct. 94, p10,12.

Restoring Freedom at the Capitol Dome, James R. Cagley, CE June 94, p57-59.

Technical Activities Group Relocates to ASCE Washington Office; for Knorr, Move Is Just the Beginning, NE Oct. 94, p1,3.

Virginia's Largest Wetlands Surround Dulles Toll Road, CE June 94, p27.

Waste disposal

Analysis of Structural Debris Generation and Disposal After Hurricane Andrew: Technical Perspective, Berrin Tansel, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p533-538.

Beneficial Use Alternatives for Water Treatment Plant Re-siduals, Ann M. Copeland, Carel Vandermeyden and David A. Cornwell, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p137-145.

Biological Removal of Heavy Metals by Sulfate Reduction Using a Submerged Packed Tower, George Neserke, Linda Figueroa and Nevis Cook, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p257-264.

Case Studies: Clay Cover Cracking Analysis Using FEM Techniques, Robert Y. Liang, John C. Lommler, Suck-hong Lee and Bob Meyers, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p86-101.

Critical Concepts for Column Testing, Charles D. Shackel-

ford, GT Oct. 94, p1804-1828.

Debris Removal Operations Following Hurricane Andrew, Rex M. Holmlin, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p539-547.

Denitrification Inhibition by High Nitrate Wastes, W. Vey-doyec, J. Silverstein, N. E. Cook, Jr., L. A. Figueroa, R. Hund and G. D. Lehmkuhl, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p415-422.

DOE's Dreyfus Seeks More Funds for Storing Hazardous Waste as Deadline Nears, NE June 94, p1,4.

Dredging '94, 2 Vols., E. Clark McNair, Jr., ed., 1994, 0-

7844-0010-5, 1580pp. Evaluation of Dynamic Compaction of Low Level Waste Burial Trenches Containing B-25 Boxes, Scott R. McMullin, (In-Situ Deep Soil Improvement, Kyle M.

Rollins, ed., 1994), p44-54.

Five Year Implementation Retrospective on the Puget Sound Dredged Disposal Analysis Program (PSDDA), David Kendall, David Fox, Stephanie Stirling, Maria Peeler, Gene Revelas, Phillip Hertzog, Justine Barton and John Malek, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1527-1553.

Household Hazardous Wastes-Discard Patterns and Management Options, Chris Zeiss, UP June 94, p87-103.

Leaching from Cementitious Waste forms in Belowground Vaults, John C. Walton, EE Nov./Dec. 94, p1507-1523.

Living in Space, Michael Wifall, (Engineering, Construc-tion, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p842-845. Meeting 503 Regulations for Ten Biosolids Incinerators

(And Associated Stories), Mark Prentice, Norman LeBlanc, Thomas E. Sadick and F. Michael Lewis, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p114-121.

Moisture and Suction in Sanitary Landfills in Semiarid Areas, G. E. Blight, J. M. Ball and J. J. Blight, EE Nov./ Dec. 92, p865-877.

Risk-Based Management of Uncertainty During Project Planning and Execution, Angel L. Rivera and Juan J. Ferrada, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p384-389.

U.S. Experience with Dynamic Compaction of Collapsible Soils, Kyle M. Rollins and Ji-Hyoung Kim, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p26-43. Utilization of Fossile Fuels Combustion Waste, Ivan Odler,

(Cement Manufacture and Use, Paul W. Brown, ed.,

1994), p57-73.

Waste Generation and Minimization in Semiconductor In-dustry, David G. Gilles and Raymond C. Loehr, EE Jan./Feb. 94, p72-86.

Waste heat

Subrepository Scale Hydrothermal Analysis in Support of Total System Performance Assessment at Yucca Mountain, Srikanta Mishra, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1202-1213.

Waste management
Advanced Coal Conversion Solid Wastes: Waste-Management Implications, Charles J. Moretti, EY Apr. 94, p1-16.

Advanced Concepts in Cement Solidification and Stabilization Technology, D. L. Cocke, M. Y. A. Mollah, T. R. Hess and R. K. Vempati, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p614-615.

Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994, 0-7844-0034-2,

621pp.

Analyzing Mass Perceptions of Nuclear Politics: Puzzling Over Trust, Hank C. Jenkins-Smith, Deborah A. Pratt and Gilbert W. Bassett, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p131-135.

At-Reactor Dry Storage Issues, Flora Emami, William Hollaway and Mark Fleming, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p1152-1160.

Avoiding Dual Regulation of the Civilian Radioactive Waste Management Program, John G. Vlahakis and Ricardo J. Palabrica, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1593-1596.

Canisters and Nonfuel Components at Commercial Nuclear Reactors, Kathy Gibbard and James Disbrow, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1543-

Cement Plant CKD Recovery System, S. M. Cohen and M. E. Prokesch, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p612.

Characterization and Use of Fluidized-Bed-Combustion Coal Ash, Christina B. Behr-Andres and Neil J. Hutzler,

EE Nov./Dec. 94, p1488-1506.

A Cooperative Agreement for Research on Radioactive Waste Management Between the United States Department of Energy and Atomic Energy of Canada Limited, Kenneth W. Dormuth and Robert A. Levich, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2409-2412.

A Critically Educated Public Explores High Level Radio-active Waste Management, Jane E. Blum, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p224-231.

Cultivating Stakeholder Interaction in Emergency Management, Wallace J. Weaver and Loretta F. Brownell, (High Level Radioactive Waste Management, High Level Ra-dioactive Waste Program Committee, 1994), p188-192.

Decision Aids for Enhancing Intergovernmental Interac-tions: The Prenotification Analysis Support System (PASS), Marcus Lester, Edward Liebow and Judith Holm, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p168-175.

Decision Analysis of Hanford Underground Storage Tank Waste Retrieval Systems, M. W. Merkhofer, D. A. Bitz, D. L. Berry and L. J. Jardine, (*High Level Radioactive* Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p1739-1744.

Developing a Public Involvement Policy for the Civilian Radioactive Waste Management Program, Susan Smith, Mary E. Gleason, Jane Summerson and Patricia Catherwood Reyes, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p176-181.

Differentiating the Experience of Boater "Publics", Ellen B. Drogin, Andrew Holdnak, Alan R. Graefe and James M. Falk, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994),

p132-139.

722

Disaster Debris Management and Diversion from Hurri-cane Iniki, Wayne Rifer, Brenda Osterhaug and Dale Burton, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p548-557.

DOE Waste Gets Big Chill, ET Oct./Nov. 94, p1,7.

Doe's Topical Report on a Methodology to Assess Vibratory Ground Motion and Fault Displacement Hazards at the Yucca Mountain Site, David F. Fenster and Richard C. Quittmeyer, (High Level Radioactive Waste Manage-ment. High Level Radioactive Waste Program Committee, 1994), p2260-2265.

Environmental Collective Action: Residential Recycling Programs, Jess W. Everett, El Apr. 94, p158-176.

Environmental Issues and Management of Concrete Waste in Japan, Yoichi Nojiri, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p424-437.

Environmental Justice: Implications for Siting of Federal Radioactive Waste Management Facilities, J. Bennett Easterling and James S. Poles, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p63-67.

Environmental Uses of Cement in Waste Conditioning, F. P. Glasser, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994),

p499-507

Fabrication Options for Depleted Uranium Components in Shielded Containers, Susan B. Derrington, James E. Thompson and Cameron W. Coates, High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p942-948.

Feasibility of Using MPCs for DOE Research and Production Fuel, Daryl A. Lopez and David G. Abbott, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p457-466.

Fitted Analytical Expressions Giving the Enrichment in U235 of a Fresh Fuel Equal to a Spent PWR Fuel, J. Anno, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p757-764.

Focus on High-Level Waste Repository Management and Regulation a Rate Regulator's Perspective, Emmit J. George, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1521-1524.

A Formal Expert Judgment Procedure for Performance Assessments of the Waste Isolation Pilot Plant, Kathleen M. Trauth, Robert V. Guzowski and Stephen C. Hora, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1745-1752

The French Mediation Mission: Siting of Underground Research Laboratories, Christian Bataille, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p.249-257.

High Level Radioactive Waste Management, 4 vols., High Level Radioactive Waste Program Committee, (Thomas L. Sanders, chmn.), 1994, 0-7844-0022-9, 3005pp.

High-Level Radioactive Waste Curriculum Usage, Evaluation, and Customer Focus, Ginger P. King, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p104-111.

Household Hazardous Wastes—Discard Patterns and Management Options, Chris Zeiss, UP June 94, p87-103.

A Human Factors Approach to Waste Form Design, Michael A. Rodriguez, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p684-690.

Human Factors Engineering Applications in the Testing of the Legal Weight Truck Cask Transportation System, Thomas C. Smith, Millard Peck, III and Robert A. Sealock, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p375-380.

A Hybrid Algorithm for Radionuclide Estimation, E. A. Yfantis, G. T. Flatman and F. S. Makri, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2063-2068.

The IAEA's High Level Radioactive Waste Management Programme, D. E. Saire, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2279-2283.

Identifying Promising Pollution-Prevention Technologies, James D. Englehardt, EE May/June 94, p513-526.

The Impact of the Doe Decision Making Process at the Waste Isolation Pilot Plant with Respect to Petroleum Reserves, Matthew Silva, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1753-1761.

Impacts of Repository Thermal Loading on System Cost, L. D. Rickertsen and W. W. Matyskiela, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p586-591.

Implementation of Response Function Concept for Spent Fuel Cask Analyses, C.-K. Chris Wang, Jack W. Foster and Dominique Napolitano, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p752-756.

Implication of Waste Package Heat Output Distributions Resulting From Waste Stream Variability, John F. King, Carol J. Rhodes and Steven F. Saterlie, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), 9868-876.

Implications of Theories of Asteroid and Comet Impact for Policy Options for Management of Spent Nuclear Fuel and High-Level Radioactive Wastes, Newell J. Trask, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1324-1328.

Improved Thermal Source Term Generation Capability for Use in Performance Assessment and System Studies, John King and Carol Rhodes, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p627-633.

Incorporating Stakeholder Values in Systems Engineering Decision Making, Philip M. Altomare, Michael L. Grygiel and Bernard G. Morais, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1762-1762.

Integrating Scientific Results for a Post-Closure Safety Demonstration, Edward C. Taylor, Lawrence D. Ramspott, Scott Sinnock and William M. Sprecher, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p301-305.

The Interactive Process: A Formal Means to Improved Relations, Allen Benson, A. C. Robison, Paul E. Seidler and Michelle D. Ulick, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p56-62. Interfaces and interactions in the Swiss Waste Disposal Programme, C. McCombie, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p238-248.

An International Approach to Radioactive Waste Management, John W. Bartlett, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p26-29.

Late Holocene Climate Derived From Vegetation History and Plant Cellulose Stable Isotope Records From the Great Basin of Western North America, Peter E. Wigand, Martha L. Hemphili and Sikha (Manna) Patra, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2574-2583.

Long-Term Evolution of the Biosphere in the Context of High-Level Waste Repository, Marianne Menut and Catherine Valentin-Ranc, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2152-2154.

Making Sense of a Sensitive Issue, Stan Reid, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p217-223.

Management of HFIR Spent Fuel, Victoria M. Green, John M. Begovich, A. L. Lotts and George F. Flanagan, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p338-342.

Microtunneling Techniques to Form an Insitu Barrier Around Existing Structures, Philip J. Coller and David G. Abbott, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p386-394.

Monitored Retrievable Storage (MRS) Facility Project Status, Ronald A. Milner, Victor W. Trebules and James B. Blandford, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1358-1364.

MPC Closure Weld Model Study, Brain J. Kruse, Joe B. Stringer and Giles G. Childress, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p435-443.

Multi-Purpose Canister At-Reactor and Monitored Retrieval Storage, Tonya H. Sawyer and Robert G. Eble, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1380-1386.

Multi-purpose Canister Conceptual Design Approach, Nick L. Seagle, Giles G. Childress, III, James R. Thornton, David N. Summers and Alan H. Wells, (*High Level Radioactive Waste Management*, High Level Radioactive Waste Program Committee, 1994), p1143–1151.

Multi-Purpose Canister Criticality Control Design Features, James R. Thornton, Kelvin J. Montague, Alan H. Wells and Daniel A. Thomas, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p823-830.

Negotiating Equity for Management of DOE Wastes, Sam A. Carmes, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), pl-8.

NEPA Implementation: The Department of Energy's Program to Manage Spent Nuclear Fuel, Dillard B. Shipler, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1532-1537.

Nuclear Arms Reduction, Nuclear Proliferation and High-Level Radioactive Waste Management, Daniel B. Bullen and James M. McCormick, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p30-39.

Nuclear Word Images as Policy Instruments, Janet S. Conary and Dennis L. Soden, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p121-130.

Optimal Control of Ground-Water Quality Management: Nonlinear Programming Approach, S. Alireza Taghavi, Richard E. Howitt and Miguel A. Mariño, WR Nov. J Dec. 94, p962-982. Overview of the Spanish High Level Radioactive Waste Programme, A. López and A. R. Beceiro, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2284-2290.

Phenomenological Studies of Two-Phase Flow Processes for Nuclear Waste Isolation, Karsten Pruess, Stefan Finsterle, Peter Persoff and Curt Oldenburg, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2639-2647.

Plans for Managing High Level Waste at the Savannah River Site, N. A. Sheikh and S. R. Salaymeh, (High Level Radioactive Waste Management, High Level Ra-dioactive Waste Program Committee, 1994), p1037-

1047

A Process for Integrating Public Involvement Into Technical/Social Programs, Susan Wiltshire and Carol Williams, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p275-279.

Public Participation in Enviornmental Issues in Taiwan, K. K. Li, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p193-200.

Reactor Life: Impacts on Waste Management, Ronald R. MacDonald and Billy M. Cole, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p1562-1566.

Reduction, Reuse, and Recycling on a Future Lunar Base, Sarah Soliz, Laura Symonds and Christine Willan, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p804-810.

Regulatory Issues Associated with the Multi-Purpose Canister (MPC) System, John P. Roberts, Robert G. Morgan, Mary L. Birch and Linda J. Desell, (High Level Radioactive Waste Management, High Level Radioactive Waste

Program Committee, 1994), p1161-1167. Review of Technologies and Alternatives for Dispositioning DOE/INEL Spent Nuclear Fuels, C. Lee Benedixsen, Jerry D. Christian, Arlin L. Olson and Tom R. Thomas, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p343-350.

Robotics for Challenging Environments, Laura A. Dem-setz, ed. and Paul R. Klarer, ed., 1994, 0-87262-913-9,

490pp.

Role of the Dual Purpose (Storage and Transport) Metal Cask In the Spanish Strategy for Temporary Storage of Spent Fuel, José Gago and José M. Grávalos, (High Level Radioactive Waste Management, High Level Ra dioactive Waste Program Committee, 1994), p1174-

Role of U.S. Nuclear Regulatory Commission's On-Site Representatives in Pre-Licensing Activities for a High-Level Radioactive Waste Repository, Philip S. Justus and John Gilray, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1712-1715.

Safeguarding the Disposal of Canada's Used Nuclear Fuel, P. Baumgartner and G. R. Simmons, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1782-1790.

Secretary of Energy Review of the Civilian Radioactive Waste Management Program, Christopher A. Kouts, Allen B. Benson and Patricia Van Nelson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p9-12.

Selecting the Design Basis Fuel for the Multi-Purpose Canister, Douglas A. Williamson, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p430-434.

Shielding Analysis for the Conceptual Design of the MPC
Transportation Cask, Kelvin J. Montague, James R. Thornton, Jr. and Robert G. Eble, Jr., (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p918-922.

Simulated Waste Package Test in Salt, Hemendra N. Kalia, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p1930-1937.

Source Evaluation of Solid Waste in Building Construc-tion, Rafael M. Gavilan and Leonhard E. Bernold, CO Sept. 94, p536-552.

Stakeholder Involvement in System Architecture Decisions, Dwight Shelor and Ruane Langton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1609-1613.

Stakeholder Involvement in the Evaluation of a Multipurpose Canister System, Jeffrey R. Williams, Dan Kane and Thomas B. Smith, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p182-187.

Stakeholder Involvement in the Evaluation of a Multipurpose Canister System, Susan Smith, Pete Bolton and Tim Dantoin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p314-1-314-6.

STRANDNET: A Top-Level Storage, TRANsportation & Disposal NETwork Systems Analysis Tool for Spent Nuclear Fuel Waste Management, Johnny Brock, Felix Godwin and Ray Mitchell, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1704-1711.

Structured Tradeoffs Preference Elicitation: Evaluating CRWMS Design and Operations, Hollister Hartman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p619-626.

System Analysis of Non-fuel Assemble Hardware and Spent Fuel Disassembly Hardware: Its Generation and Recommended Disposal, Douglas A. Williamson and James S. Tulenko, (*High Level Radioactive Waste Man*agement, High Level Radioactive Waste Program Committee, 1994), p1553-1561.

System Implementation of the Multipurpose Canister, William R. Hollaway and Robert Rozier, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1137-1142.

Systems Engineering Applied to the Development of the Yucca Mountain Project Design Requirements Docu-ments, M. Sam Rindskopf and Dennis C. Royer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), pi634-

Systems Modeling for the DOE Spent Nuclear Fuer Program, Dennis Evans, Corey Beebe, Michael Caldwell, Brett Carlsen, Gina Ban, David Van Haaften and Scott Gladson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p331-337.

Technical and Institutional Features of High-Level Radio-Ground, Tom Isaacs, (High Level Radioactive Waste Management: Searching for Common Ground, Tom Isaacs, (High Level Radioactive Waste Program Committee, 1994), p263-266.

Technology Development and Transfer in Environmental Management, Jonathan Katz, Alan Karnovitz and Martin Yarbrough, (High Level Radioactive Waste Manage-ment, High Level Radioactive Waste Program Committee, 1994), p314-7-314-12.

Technology Information Transfer in Public Outreach: A New Approach, John H. Peck and Mindy L. Wadkins, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p92-97.

Thermal Qualification Testing of Efficient Neutron Shield Materials, Richard H. Boonstra, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p765-771.

Thermal Response of the Waste Package/MPC and EBS, Robert H. Bahney, III and Thomas W. Doering, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p809-815.

Toward Integrated Design of Waste Management Technologies, Sam A. Carnes and Amy K. Wolfe, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p267-274.

Training for Effective Public Outreach: A Model for Transportation Risk Communication Training, Judith Holm, Kathie Reed and Dick Tardif, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p83-87.

Transition from the Functional Requirements to the Technical Requirements Baseline, T. A. Mozhi, S. Douara, M. Senderling and T. Truong, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1641-1647.

Trash Collection Goes High-Tech, CE Aug. 94, p78.

U-234/U-238 Ratio: Qualitative Estimate of Groundwater Flow in Rocky Flats Monitoring Wells, J. C. Laul, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2702-

Using Planning Scenarios for DOE Radioactive Waste Management: The Case of the Advanced Neutron Source, David Lewis Feldman, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p1696-1703.

Verification of the AECL Total System Performance Models, Keith Kersch and Steve Oliver, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2437-2441.

Waste Generation and Minimization in Semiconductor Industry, David G. Gilles and Raymond C. Loehr, EE Jan./Feb. 94, p72-86.

Waste Minimization and Recycling by Microfiltration dur-ing Nitrocellulose Manufacturing, Lee Clapp, Jae K. Park and Byung J. Kim, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p98-105.

Waste Package Materials Selection Process, Ajit K. Roy, Robert L. Fish and R. D. McCright, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p993-999.

What Do We Mean By a "Cold Repository"? William G. Halsey, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2183-2188.

What's Science Got To Do With It?: The Use of Public Opinion in Developing Nuclear Waste Policy, Eric B. Herzik and John L. Dobra, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p112-120.

Waste processing facilities

Taking Trash Out of Hiding, Keith R. Connor, R. Chris Brockway and Bruce E. Henning, CE Feb. 94, p40-43.

Cement Plant CKD Recovery System, S. M. Cohen and M. E. Prokesch. (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p612.

Reduction, Reuse, and Recycling on a Future Lunar Base, Sarah Soliz, Laura Symonds and Christine Willan, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994),

Taking Trash Out of Hiding, Keith R. Connor, R. Chris Brockway and Bruce E. Henning, CE Feb. 94, p40-43.

Trash Collection Goes High-Tech, CE Aug. 94, p78. The Use of Recyclable Waste Materials in Hot Mix Asphalt Concrete Highway Pavements, Stanley K. Ciesielski, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p327-335.

Waste Minimization and Recycling by Microfiltration dur-ing Nitrocellulose Manufacturing, Lee Clapp, Jae K. Park and Byung J. Kim, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p98-105.

Waste site cleanup

An Experiment in Mobile Robotic Cooperation, Lynne E. Parker, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p131-139

Federal Cleanups: Good News from Bad, Teresa Austin, CE Mar. 94, p48-51.

Groundwater Remediation at a Superfund Site, Henry Y. He, Jing-Yea Yang and Gregory Powell, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p282-286.

Houdini: In-Tank Mobile Cleanup Robot, Hagen Schempf,

(Robotics for Challenging Environments, Laura A. Dem-

setz, ed. and Paul R. Klarer, ed., 1994), p286-295. Intelligent Design and Remediation of Shallow Landfill Burial Systems, James C. Ascough, II, Leonard J. Lane and Thomas E. Hakonson, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p257-264. Investments in the Future, James Denning, CE July 94,

p40-43.

Iron and Sand Marge to Treat TCE-Contaminated Water,

ET June/July 94, p5.

Managing Uncertainty in Environmental Remediation Project Planning, Guru N. Rao and Francois Grobler, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p208-215.

A New Angle on Ground-Water Remediation, Vernon M. Reid, Kennon W. Wyatt and James A. Horn, CE Apr. 94,

Risk Variability from Uniform Soil Remediation Goals for PCBs, Paula A. Labieniec, David A. Dzombak and Robert L. Siegrist, EE May/June 94, p495-512. Robotic Opportunities for Hazardous-Waste Cleanup, Ed-

ward J. Jaselskis and Mary Rose Anderson, EE Mar./

Apr. 94, p359-378.

Robotic Workcell for Waste Handling, Gregory P. Starr, Gregory W. Donohoe, David Wilson and Raghu Kopalle, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p347-355.

Spoils of War, Richard S. Skryness, Karl Swenson and

Williams Pananos, CE Nov. 94, p51-53.

Weeding Out Wastes, ET Dec. 94/Jan. 95, p10.

Waste sites

Assessing Risk of Ground-water Pollution from Land-Disposed Wastes, Kahraman Ünlü, EE Nov/Dec. 94, p1578-1597.

The Assessment of Future Human Actions at Radioactive Waste Disposal Sites: An International Perspective, D. R. Anderson, D. A. Galson and E. S. Patera, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1286-1291

the waster Program Committee, 1994, p.12-80-1291.

A Critically Educated Public Explores High Level Radioactive Waste Management, Jane E. Blum, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p.224-231.

An Evaluation of the Impact of Recent Flooding on the Operation of a Groundwater Extraction and Treatment System at a Superfund Site, Kerry L. Gavett, Michael J. Fiore and Eric J. Meyer, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p764-771.

Technical and Institutional Features of High-Level Radioactive Waste Management: Searching for Common Ground, Tom Isaacs, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p263-266.

Voluntary vs. Directed Siting - Or Somewhere In-Between? Elizabeth Peelle, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p201-212.

Analysis of Potential Highway Routes to Yucca Mou Shashi K. Sathisan, Emelinda M. Parentela and Michael S. Lee, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1278-1285.

Analyzing Mass Perceptions of Nuclear Politics: Puzzling Over Trust, Hank C. Jenkins-Smith, Deborah A. Pratt and Gilbert W. Bassett, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p131-135.

Application of Lessons Learned Experience To Human Factor Engineering of the Planned Monitored Retrieva ble Storage Facility, Dan Kane, Hok Wai Kwan and John Richardson, (High Level Radioactive Waste Manage-ment, High Level Radioactive Waste Program Committee, 1994), p351-357.

At-Reactor Dry Storage Issues, Flora Emami, William Hollaway and Mark Fleming, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p1152-1160.

A Borehole Instrumentation Program for Characterization of Unsaturated-Zone Percolation, Jack Kume and Joseph P. Rousseau, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2076-2082

Burnup Verification Using the Fork Measurement System, Ronald I. Ewing, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Com-

mittee, 1994), p732-738.

Calculation of k_{eff} For Plutonium in High-Level Waste Packages, Paige R. Zielinski and William G. Culbreth, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p679-683.

Can Long Term Criteria for Deep Disposal be Implemented, K. Bragg, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Commit-

tee, 1994), p1397-1403.

- Canisters and Nonfuel Components at Commercial Nuclear Reactors, Kahly Gibbard and James Disbrow, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1543-1552.
- The Case for Retrievable High-Level Nuclear Waste Disposal, Eugene H. Roseboom, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1774-1781.

Categorization of Department of Energy Spent Nuclear Fuel, Denzel L. Fillmore, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p315-319.

Certification of a Spent Fuel Cask for Storage and Transportation, Meg Lusardi, Robert M. Bernero and Charles H. Haughney, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1168-1173.

A Comparative Study of U.S. and Russian High-Level Waste Repository Design Concepts, Z. T. Bieniawski and E. V. Kuzmin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Com-

mittee, 1994), p515-522

Confirmation of MRS/MPC Transfer Facility Sizing Using Simulation Modeling, E. Scott Houston and Jennifer D. Hadley, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1387-1392.

A Cooperative Agreement for Research on Radioactive Waste Management Between the United States Department of Energy and Atomic Energy of Canada Limited, Kenneth W. Dormuth and Robert A. Levich, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2409-2412.

Development and Feasibility of a Waste Package Coupled Reactive Transport Model (AREST-CT), David W. Engel, B. Pete McGrail, James A. Fort and Janet S. Roberts, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1214-1221.

Dry Storage and Transportation of Failed Fuel, Robert D. Quinn and Brandon D. Thomas, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p949-954.

Dry Storage of Highly Enriched Uranium Fuel, D. L. Lord, J. A. Carter and L. F. Ermold, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), pl 131-1136.

Effect of Fractures on Repository Dryout, Roger R. Eaton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p2442-2449.

The Efficiency of Source Terms in Performance Assessments for Salt Repositories, Dieter Buhmann, Jürgen Brenner and Richard Storck, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p501-507.

Environmental Justice: Implications for Siting of Federal Radioactive Waste Management Facilities, J. Bennett Easterling and James S. Poles, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p63-67.

An Evaluation of Rail Access Routes to Yucca Mountain, Shashi K. Sathisan and Emelinda M. Prarentela, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1270-

1277

Expected Reaction to Various Options for Spent-Fuel Storage, John Richardson, Christopher Charles and Ausra Michards, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), 98-103.

Experimental Heat Transfer and Fluid Flow Over Drift-Emplaced Canisters, William G. Culbreth and Satish Pattisam, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p772-7

Exploratory Studies Facility and Potential Repository Source Term, J. D. Smith, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p549-553.

Fabrication Options for Depleted Uranium Components in Shielded Containers, Susan B. Derrington, James E. Thompson and Cameron W. Coates, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), 942-948.

Feasibility of Using MPCs for DOE Research and Production Fuel, Daryl A. Lopez and David G. Abbott, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p457-466.

Final Storage of High Activity Waste in Spain, Aurelio Ulibarri, Fernando Huertas and Jesús Alonso, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p538-548.

The First Multipurpose Spent Fuel Container Reviewed by the U.S. Nuclear Regulatory Commission (USNRC), Ivan F. Stuart, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), 4967-476.

Further Development of a Source Term Model for a Repository in Unsaturated Tuff, Richard Codell and Richard Weller, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p477-484.

Gully Potential in Soil-Covered Uranium Waste Impoundments, Steven R. Abt, Christopher J. Pauley, Scott A. Hogan and Terry L. Johnson, EY Aug. 94, p51-66.

High Level Radioactive Waste Management, 4 vols., High Level Radioactive Waste Program Committee, (Thomas L. Sanders, chm.), 1994, 0-7844-0022-9, 3005pp.

High Level Waste Disposal and Reprocessing in the UK, Nicholas L. Griffin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1690-1695.

Hills, Charles R. Vojislav Banjac and A. Sharif Heger, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p671-678.

A Human Factors Approach to Waste Form Design, Michael A. Rodriguez, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p684-690.

Immobilizing the Calcined High Level Waste in Glass and Crystalline Phases, S. V. Raman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1124-1130.

Impacts of Repository Thermal Loading on System Cost, L. D. Rickertsen and W. W. Matyskiela, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p586-591.

Implementation of Response Function Concept for Spent Fuel Cask Analyses, C.-K. Chris Wang, Jack W. Foster and Dominique Napolitano, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p752-756. Implementation of Spent Fuel Storage Options - A Utility Project Engineers Perspective, Steven M. Unikewicz, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

Implications of Theories of Asteroid and Comet Impact for Policy Options for Management of Spent Nuclear Fuel and High-Level Radioactive Wastes, Newell J. Trask, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1324-1328.

Incorporating Stakeholder Values in Systems Engineering Decision Making, Philip M. Altomare, Michael L. Grygiel and Bernard G. Morais, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p1762-1769.

Integrated Geology and Preliminary Cross Section Along the North Ramp of the Exploratory Studies Facility, Yucca Mountain, D. C. Buesch, R. P. Dickerson, R. M. Drake and R. W. Spengler, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1055-1065.

Integration of Regulations and Science for HLW Disposal, Lawrence D. Ramspott, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p292-295.

Investigation and Design Concepts for a Nuclear Waste Repository in the Kola Peninsula of Northwest Russia, Nikolay N. Melnikov and William R. Sharp, (*High Level* Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p523-529.

Investigation of Stress in a Circular Tunnel Due to Overburden and Thermal Loading of Horizontally Placed 21 PWR Multi Purpose Canisters, Nadia Kandalaft-Ladkany and Richard V. Wyman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p860-867.

Limitations on Scientific Prediction and How They Could Affect Repository Licensing, Richard A. Van Konynen-burg, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p285-291

Long Term Nuclear Criticality Potential in Waste Packages, Daniel A. Thomas and Thomas W. Doering, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p838-844.

The Long Term Radioactive Storage Alternative, Cyril W. Draffin, Jr., Richard G. Little and Richard Blauvelt, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

Management of HFIR Spent Fuel, Victoria M. Green, John M. Begovich, A. L. Lotts and George F. Flanagan, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p338-342.

A molecular Solution to Radioactive Waste, ET Dec. 94/Jan. 95, p11.

Monitored Retrievable Storage (MRS) Facility Project Status, Ronald A. Milner, Victor W. Trebules and James B. Blandford, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1358-1364

Monitored Retrievable Storage/Multi-Purpose Canister Analysis: Simulation and Economics of Automation, Phil C. Bennett and Joe B. Stringer, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p363-369.

Monitored Retrievable Storage: A Test of Cultural Values and A Symbol of Tribal Sovereignty, W. A. White-Tail Feather, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p68-75.

Multi-Purpose Canister At-Reactor and Monitored Retrieval Storage, Tonya H. Sawyer and Robert G. Eble, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1380-1386.

NEPA Implementation: The Department of Energy's Program to Manage Spent Nuclear Fuel, Dillard B. Shipler, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1532-1537.

Nuclear Arms Reduction, Nuclear Proliferation and High-Level Radioactive Waste Management, Daniel B. Bullen and James M. McCormick, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p30-39.

Nuclear Word Images as Policy Instruments, Janet S. Conary and Dennis L. Soden, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p121-130.

A Numerical Study of Convection Heat Transfer Within Enclosed Horizontal Rod-Bundles, M. Keyhani and L. Luo, (High Level Radioactive Waste Management, High

Level Radioactive Waste Program Committee, 1994), p780-787.

p100-101.

Paper Summary Inventory Assessment of DOE Spent Nuclear Fuels, David G. Abbott, Alan R. Bringhurst and Denzel L. Fillmore, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p320-330.

Performance Assessment of the INEL Spent Fuel and HLW in Two Hypothetical Repositories, Larry L. Taylor, Robert P. Rechard, Henry H. Loo, Ronald D. Klinger and Leonard F. Ermold, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1508-1513.

The Politics of Nuclear-Waste Disposal, Paul Tarricone,

CE Mar. 94, p56-58.

C.E. Mar. 74, DO-78.
Population Estimation Techniques for Routing Analysis,
Shashi K. Sathisan and Anil K. Chagari, (High Level Radioactive Waste Management, High Level Radioactive
Waste Program Committee, 1994), 9658-665.
Preliminary Assessment of Potential Sites for a Monitored
Retrievable Storage (MRS) Eacility, Loic C. Smith.

Retrievable Storage (MRS) Facility, Lois S. Smith, Thomas H. Rogers, Arthur Dailey and Jeffrey R. Williams, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1372-1379.

Public Opinion Polling and the Yucca Mountain Controversy: A Seven Year Inventory (12/86-8/93), Jeffery J. Himmelberger and Mike L. Baughman, (High Level Ra-dioactive Waste Management, High Level Radioactive

Waste Program Committee, 1994), p142-149. Radiological Characterization of Hanford HLW Tank Farm Core Samples, Vojislav Banjac and A. Sharif Heger, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1110-1116.

Rationale for Determining Spent Fuel Acquisitions for Repository Testing, Steven C. Marschman, Robert E. Einziger and Ray B. Stout, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1074-1079.

The Reactivity Effects of Nuclide Buildup and Decay During Long-Term Fuel Storage, T. Suto, S. M. Bowman and C. V. Parks, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Com-

mittee, 1994), p831-837.

Recent Advances in Precision Surveying Technology and Integrated Deformation Analysis, Adam Chrzanowski, W. Trevor Greening and Anna Szostak-Chrzanowski, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p721-731.

Regulatory Issues Associated with the Multi-Purpose Canister (MPC) System, John P. Roberts, Robert G. Morgan, Mary L. Birch and Linda J. Desell, (High Level Radioactive Waste Management, High Level Radioactive Waste

Program Committee, 1994), p1161-1167. Remote Infrared System for Scanning Hazardous Waste Tanks, Kim L. H. Morris, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p1104-1109.

Repository Criticality Safety for the DOE Spent Nuclear Fuel Program, Dennis Evans and Brian Palmer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p852-859.

Review of Technologies and Alternatives for Dispositioning DOE/INEL Spent Nuclear Fuels, C. Lee Benedixsen, Jerry D. Christian, Arlin L. Olson and Tom R. Thomas, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p343-350.

Role of the Dual Purpose (Storage and Transport) Metal Cask In the Spanish Strategy for Temporary Storage of Spent Fuel, José Gago and José M. Grávalos, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1174-1178.

Selecting the Design Basis Fuel for the Multi-Purpose Canister, Douglas A. Williamson, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p430-434.

Spent Fuel Characteristics Relevant to High-Level Waste (HLW) Source Term, Hersh K. Manaktala, Prasad K. Nair and Charles G. Interrante, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p560-564.

Stakeholder Involvement in the Evaluation of a Multipurpose Canister System, Jeffrey R. Williams, Dan Kane and Thomas B. Smith, Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p182-187.

Standards for High Level Radioactive Waste Repositories, Dade W. Moeller, Martin J. Steindler, Paul W. Pomeroy and William J. Hinze, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p1417-1421.

STRANDNET: A Top-Level Storage, TRANsportation & Disposal NETwork Systems Analysis Tool for Spent Nuclear Fuel Waste Management, Johnny Brock, Felix Godwin and Ray Mitchell, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1704-1711.

Subrepository Scale Hydrothermal Analysis in Support of Total System Performance Assessment at Yucca Mountain, Srikanta Mishra, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p1202-1213.

The Sundance Fault: A Newly Recognized Shear Zone at Yucca Mountain, Nevada, R. W. Spengler, C. A. Braun, L. G. Martin and C. W. Weisenberg, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2359-2366.

System Implementation of the Multipurpose Canister, William R. Hollaway and Robert Rozier, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), pl 137-1142.

- A Systems Approach to the Management of a Contaminated Metal Recycle Project. Layne Pincock and Steven Wahnachaffe, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1069-1073.
- Tank Waste Information Network System (TWINS), Gary D. Roberson, Jim Brown and Dana S. Roberson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1731-1738.

Testing the Spatial Neutrality of the REMI Net Migration Equation, Charles F. Barr, Nasser Daneshvary, Thomas A. Perrigo and Dan S. Rickman, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p40-47.

Thermal Performance of a Depleted Uranium Shielded Storage, Transportation, and Disposal Package, S. D. Wix and H. R. Yoshimura, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p877-881.

Transfer of Spent Nuclear Fuel Into Multi-Purpose Canister Storage, Roger G. Wagstaff, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p444-451.

Tunnel Boring Machine for Nuclear Waste Repository Research Project, Hans A. Janzon, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p403-410.

- A Tunnel Boring System for the Yucca Mountain Project, Steven N. Short, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p381-385.
- Urban Versus Rural Risk Perception Relating to High-Level Nuclear Waste, Dennis L. Soden, 'figh Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), pl 30-141.
- Utility Industry Perspectives on Repository Licensing, Christopher J. Henkel, Jay E. Silberg and Mindy A. Buren, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1567-1572.
- Waste Package Performance Allocation System Study Report, Richard D. Memory, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p969-976.

Waste treatment

- Effects of Temperature and pH on Residual Aluminum in Alkaline-Treated Waters, John E. Van Benschoten, James N. Jensen and Md. A. Rahman, EE May/June 94, p543-559.
- Feasibility Analysis of Automated Material Handling for Hazardous Waste Remediation, Andrew F. Griffith, Carl T. Haas and Richard L. Tucker, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p338-346.

Fresh Kills to Get Fresher Leachate, CE June 94, p20.

- Heavy Metal Removal from Soil by Coupled Electric-Hydraulic Gradient, Lutful I. Khan and M. Sahidul Alam, EE Nov./Dec. 94, p1524-1543.
- Landfill Leachate Treatment by Evaporation, Deborah R. Birchler, Mark W. Milke, A. Leigh Marks and Richard G. Luthy, EE Sept./Oct. 94, p1109-1131.
- A molecular Solution to Radioactive Waste, ET Dec. 94/Jan. 95, p11.
- The Performance of Unconfined Hollow Fiber Membranes as Pipe Flow and Mixed Flow Aerators, Drew W. Johnson and Michael J. Semmens, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p106-113.
- Reduction, Reuse, and Recycling on a Future Lunar Base, Sarah Soliz, Laura Symonds and Christine Willan, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p804-810.
- Risk-Based Management of Uncertainty During Project Planning and Execution, Angel L. Rivera and Juan J. Ferrada, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p384-389.
- Underwater Cleanup of a Pool of Liquid Creosote, B. G. Bennett and I. K. Hill, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p961-970.

Weeding Out Wastes, ET Dec. 94/Jan. 95, p10.

Waste utilization

Beneficial Use of Ash: An Innovative Approach to Sludge Management, Michael E. Manning, John R. Amend and Mark K. Ballerstein, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p146-153.

Beneficial uses of dredged material principles and practice, T. Neville Burt and Michael P. Dearnaley, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p631-643.

- Beneficial Uses of Dredged Material: Part of the Solution to Restoration of Louisiana's Coastal Wetlands, Linda Glenboski Mathies, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p626-630.
- Bioleaching of Metals from Sewage Sludge: Elemental Sulfur Recovery, B. R. Ravishankar, J. F. Blais, H. Benmoussa and R. D. Tyagi, EE Mar./Apr. 94, p462-470.
- Cement Manufacture and Use, Paul W. Brown, ed., 1994, 0-7844-0048-2, 324pp.
- Cement Plant CKD Recovery System, S. M. Cohen and M. E. Prokesch, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p612.

Cementing Action in Non-Portland Cement Systems: Sulpho-Pozzolanic and Silico-Pozzolanic Reactivity, R. T. Hemmings and E. E. Berry, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p329-336.

Characterization and Use of Fluidized-Bed-Combustion Coal Ash, Christina B. Behr-Andres and Neil J. Hutzler,

EE Nov./Dec. 94, p1488-1506.

Constructing Beneficial Use Dredged Material Projects, Robert M. Parry, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p547-554. Engineering Sustainable Development, John Prendergast,

ČE Oct. 93, p39-42.

Environmental Issues and Management of Concrete Waste in Japan, Yoichi Nojiri, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p424-437.

Environmental Technology Management of the Cement Industry in India and Neighbouring Countries, A. K. Chat-terjee, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994),

p438-480.

Evaluating the Use of Waste Materials in Hot Mix Asphalt, Dale S. Decker, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1042-1050

The Influence of Kiln Atmosphere on Clinker Characteris-tics, F. P. Sorrentino, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar. ed., 1994), p65-78.

Innovative Civil Engineering Material from Sewage Sludge: Biocement and Its Use As Blended Cement Material, Joo-Hwa Tay and Kuan-Yeow Show, MT Feb. 94, p23-33.

Mineral Admixtures for Concrete - An Overview of Recent Developments, P. K. Mehta, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p243-256.

New Applications and Practices for Beneficial Uses of Dredged Material, M. C. Landin, J. Fowler and H. H. Allen, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p526-536.

Progress in England and Wales on the Development of Beneficial Uses of Dredged Material, L. A. Murray, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p644 653.

Soil Stabilization Using Oil-Shale Solid Waste, John P. Turner, GT Apr. 94, p646-660.

Strategy for Beneficial Use of Stoker-Boiler Coal Ash, Christina B. Behr-Andres, Gordon K. Parish and Neil J. Hutzler, EE Mar./Apr. 94, p401-415. Taiwan Promotes Waste Incineration, CE Sept. 94, p14.

The Use of Secondary Products in the Cement and Concrete Industry, Bjarne Osbaeck, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p107-121.

Use of Wastes as Fuels in the Cement Industry: Pros & Cons, Ferenc D. Tamás and Márta Pátkai-Horváth, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p82-102.

Utilization of Fossile Fuels Combustion Waste, Ivan Odler, (Cement Manufacture and Use, Paul W. Brown, ed.,

1994), p57-73.

Utilization of Phosphogypsum-Based Slag Aggregate in Portland Cement and Asphaltic Concrete Mixtures, Paul T. Foxworthy, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p75-85.

Utilization of Used Foundry Sand in Concrete, Tarun R. Naik, Viral M. Patel, Dhaval M. Parikh and Mathew P. Tharaniyil, MT May 94, p254-263.

Utilization of Waste Solvent Fuels in Cement Manufacturing, Gregory S. Barger, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p41-55.

Constant-Speed Pubping Stations Can Clean Up for the First Time, ET Apr./May 94, p7.

Court Clarifies Subcontractor Indemnity, CE May 94, p30. Deer Island Hydropower Plant Fueled By Wastewater, CE Mar. 94, p14.

Dual Purpose Pipeline in the 1900s Environment, Randall C. Hill and Javier Saunders, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p119-128.

The Implementation of a Comprehensive Water and Wastewater Utility Development Fee Process to Allocate the Cost of New Development to the Beneficiaries, Kenneth M. Needham and Joyce Kinnear, (Revenue Enhancement for Water and Wastewater Systems, Jerry R. Rogers, ed. and William P. Bullock, Jr., cd., 1994), p24-30.

Interceptor Inspection and Rehabilitation Program, William A. Macaitis and Amreek Paintal, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p123-142.

KBES for Process Control of Nitrification in Activated Sludge Process, Naci H. Ozgur and Michael K. Sten-

strom, EE Jan./Feb. 94, p87-107.

Reusable Water Exhange Modeling, John R. Clark and John N. Winchester, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p738-741.

The Scottsdale Water Campus: There's Nothing Like It, Wallace A. Ambrose, Brad Hemken, Gary G. Small and Leonard Dueker, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p665-668.

Strange Attractors and Chaos in Wastewater Flow, Donald I. Angelbeck and Rafic Y. Minkara, EE Jan./Feb. 94, p122-137.

Wastewater disposal

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CSO Rehabilitation Strategies for Urban Areas, Edward H. Burgess and Larry A. Roesner, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p184-193.

Hydraulics of Seawater Purging in Tunneled Wastewater Outfall, E. Eric Adams, Dipak Sahoo, Christopher R. Liro and Xueyong Zhang, HY Feb. 94, p209-226.

Investigation of Dry-Weather Pollutant Entries Into Storm-Drainage Systems, Richard Field, Robert Pitt, Melinda Lalor, Michael Brown, William Vilkelis and Edward Phackston, EE Sept./Oct. 94, p1044-1066.

Modeling Initial Mixing of Ocean Wastewater Discharges to Develop Toxic Effluent Limitations, Christopher C Obropta and Scott T. Taylor, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1047-1054.

Wastewater management

Achieving Adequate BMP's for Stormwater Quality Management, Anne Jones-Lee and G. Fred Lee, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p524-531.

Computer Control of CSOs, Russell W. Batzell, CE Nov. 94, p58-59.

Pretreatment of Secondary Effluent for Drip Irrigation, Massoud A. Tajrishy, David J. Hills and George Tchobanoglous, IR July/Aug. 94, p716-731.
Revenue Enhancement for Water and Wastewater Systems,

Jerry R. Rogers, ed. and William P. Bullock, Jr., ed.,

1994, 0-7844-0030-X, 35pp.

SCADA System Controls Combined Sewer Overflow Regulation System to Optimize Wastewater Collection, Russell W. Batzel, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p822-828.

Wastewater treatment

Assessment of BNR Systems in Florida, Richard O. Mines, Jr. and C. William Woods, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p436-443.

Automated ORP Control for Aerobic/Anoxic Cycling in Oxidation Ditch Treatment, Thomas E. Coleman, H. David Stensel, Darrel Fleischman and W. Brent Denham, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p444Beneficial Use Alternatives for Water Treatment Plant Residuals, Ann M. Copeland, Carel Vandermeyden and David A. Cornwell, (Critical Issues in Water and Waste-

David A. Cornwell, (Critical Issues in Water and Waster-water Treatment, Joseph N. Ryan, ed. and Mare Ed-wards, ed., 1994), p137-145.

Beneficial Use of Ash: An Innovative Approach to Sludge Management, Michael E. Manning, John R. Amend and Mark K. Ballerstein, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p146-153.

Biodegradation of 2,4-Dinitrotoluene in a Two Stage Sys-tem, S. I. Vanderl. oon, M. T. Suidan, M. A. Moteleh

tem, S. L. VanderLoop, M. T. Suidan, M. A. Moteleb and S. W. Maloney, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p710-717.

Biological Removal of Heavy Metals by Sulfate Reduction Using a Submerged Packed Tower, George Neserke, Linda Figueroa and Nevis Cook, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p257-264.
Biological Upflow Fluidized Bed Denitrification Reactor

Demonstration Project-Stamford, Ct. Jeannette Semon, Thomas Sadick, Dennis Palumbo, Richard Schede, Marylee Santoro, Marvin Schneider and Steven Lesando, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p428-435.

Calibration of Poorly Identifiable Systems: Application to Activated Sludge Model, Marcos von Sperling, EE

May/June 94, p625-644.
Cladding Goes Over Eggs Easy, CE Feb. 94, p77.
Cleaning Wastewater Isn't Cheap, CE July 94, p8.

Clearing the Air About Sludge Incinerator Emissions, Phillip M. Martin, Eugene W. Waltz and Richard D. Kuchenrither, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p122-128.

Colloidal Fouling of Reverse Osmosis Membranes, Menachem Elimelech and Xiaohua Zhu, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p329-335.

Comprehensive Fate Model for Metals in Municipal

Wastewater Treatment, Wayne J. Parker, Hugh D. Monteith, John P. Bell, Henryk Melcer and P. Mac

Berthouex, EE Sept./Oct. 94, p1266-1283.
Computer Aided Design of Trickling Filters, Bruce E. Logan, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed.,

1994), p678-685.

Computerized Facility Information Management Systems, Mike Tidwell and Cal Leckington, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p396-401.

Continuous Treatment of Textile Water by Ozonation and Coagulation, Sheng H. Lin and Wen Y. Liu, EE Mar. Apr. 94, p437-446.
Control of Odor and VOC Emissions at Wastewater Treat-

ment Plants -Boston Harbor Case Study-, Robert Getter, Cheryl Breen and Mark Laquidara, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p548-555.

A Coupled Mass Transfer and Surface Complexation Model for Uranium (VI) Removal from Wastewaters,

John Lenhart, Linda A. Figueroa and Bruce D. Honeyman, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p249-256.

Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994, 0-7844-

0031-8, 825pp.

CSO Rehabilitation Strategies for Urban Areas, Edward H. Burgess and Larry A. Roesner, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drain age Rehabilitation Programs and Techniques, ASCE, 1994), p184-193.

Denitrification Inhibition by High Nitrate Wastes, W. Vey-dovec, J. Silverstein, N. E. Cook, Jr., L. A. Figueroa, R. Hund and G. D. Lehmkuhl, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p415-422.

Design of Mat Foundation for Egg Shape Digesters, S. S. Ibrahim and M. R. Graves, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p13-18.

Design/Construction of a CFD Over Dredged Sludge, Jeffrey D. Horsfall and Katherine E. Martin, (Dredging

Jeffield D. Florisal and National Conference of the ABF/AS Process, Julian Sandino and Ross E. McKinney, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p686-693.

Effect of HRT on Acidogenic Digestion of Primary Sludge, P. Elefsiniotis and W. K. Oldham, EE May/June 94,

p645-660.

Effect of Sludge Blend on Dewatering Characteristics, Ali Davarinejad and Nikolay Voutchkov, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p273-280.

Eliminating Water Column Separation and Limiting Backspin at a 12.000-Horsepower Pumping Plant, Paul Otter, David Hoisington and David Raffel, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p435-444.
Emissions, Ambient Concentrations, and Potential Health

Hazards of VOCs from Wastewater Treatment, Jin-Sheng Lin and Lynn M. Hildemann, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p580-584.
Estimating Toxicity of Organic Chemicals to Activated-

Sludge Microorganisms, B. Sun, N. Nirmalakhandan, E. Hall, X. H. Wang, J. Prakash and R. Maynes, EE Nov./ Dec. 94, p1459-1469.

Factors Affecting Nitrite Buildup in Submerged Filter Sys-tem, Oliver J. Hao and Jin M. Chen, EE Sept./Oct. 94, p1298-1307.

Heavy Metal Removal Using Peat/Wetland Treatment, Suzanne Murawski, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p408-414.

Hydraulic Age Distribution in Perfectly Mixed Non-Steady-State Reactors, Marcelo Juanico and Eran

Friedler, EE Nov./Dec. 94, p1427-1445. Local Sewer Rehabilitation - Metro Chicago, William A. Macaitis and Robert Kuhl, (Urban Drainage Rehabilita-tion Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p111-122.

Measurement and Automatic Control of Chlorination, Robert Hill and James Martin, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p718-725.

Meeting 503 Regulations for Ten Biosolids Incinerators (And Associated Stories), Mark Prentice, Norman LeBlanc, Thomas E. Sadick and F. Michael Lewis, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p114-121. Model of an Upgrade, Bruce Gall and Alan A. Smith, CE

July 94, p60-62.

Modeling Full-Scale Diffused Aeration Systems, Terry L. Johnson and Ross E. McKinney, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p702-709.

Modeling Pollutant Fate and Transport in Constructed Wetlands, Russell T. Brown, Joanne Field, Michael J. Zanoli and Ron W. Crites, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p532-539.

Modeling Volatile Organic Contaminants' Fate in Waste-water Treatment Plants, H. Melcer, J. P. Bell, D. J. Thompson, C. M. Yendt, J. Kemp and P. Steel, EE May/

June 94, p588-609.

Modifying One of the Nation's Most Successful Biosolids Lime Stabilization Operations, Randy Naef, Ronald J. Matheson, Mike Guthrie and Tracy Cork, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p154-161.

NCASI Experiment Related to Validation of Equilibrium Partitioning (EP) Theory, Steven W. Hinton, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p737-742

A New Angle on Ground-Water Remediation, Vernon M. Reid, Kennon W. Wyatt and James A. Horn, CE Apr. 94, p56-58.

Nitrification in Single-Stage Trickling Filters, Rao Y. Surampalli, O. Karl Scheible and Shankha K. Banerji, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p694-

No Time to Waste on Mexico Wastewater Project, CE Sept. 94, p21-22

Optimization Studies of Anaerobic Expanded Bed Reactor Pretreatment of Domestic Wastewater, Thomas L. Theis, Bruce J. Alderman and Anthony G. Collins, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p289-296.

Performance Evaluation of Constructed Wetland Treatment System, L. B. Sumrall, R. Y. Surampalli, S. K. Banerji and D. M. Sievers, CR June 94, p35-46.

The Plants Must Go On, CE May 94, p8.

Process Selection for Treatment of SOC Contaminated Waters, Bruce I. Dvorak, Desmond F. Lawler and Gerald E. Speitel, Jr., (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p601-608.

Reclaiming Water With Wetlands, Christie Moon Crother, CE July 94, p52-55.

Recovery and Recycling of Copper from Wastewater using Iron Coated GAC, Kotha P. Reddy, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p392-399.

Recovery of Chromium from Spent Plating Solutions by a Chromyl Chloride Process, Subbarao L. Guddati, Thomas M. Holsen and J. Robert Selman, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p241-248.

Reducing Discharges from San Francisco to the Bay, James J. Jordan and Sangeeta Goyal, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed.

and Harry N. Tuvel, ed., 1994), p842-845

Reducing Wastewater Sludge Pathogens Using Heat Treatment, Mark Kennedy, Kondapalli Reddy and Lyle Johnson, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p281-288.

The Regulatory Pendulum: Has it Finally Come to Rest for CSO Control? Nancy J. Wheatley, (National Water Re-sources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p187-197

Removal of Formate from Wastewater by Anaerobic Process, Ho Kwong Chui, Herbert H. P. Fang and Yu You Li, EE Sept./Oct. 94, p1308-1320.

Report Recommends 'Tailored' Infrastructure, CE June 94,

The Rest of the Best, Josh Kosman, CE July 94, p44-48. Sensitized Photooxidation of Dissolved Sulfides in Water, T. F. Brewer, J. G. Curtis, E. A. Marchand, V. D. Adams and E. J. Middlebrooks, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p233-240.

Start-ups, CE May 94, p8.
Surface Water Quality Modeling in the Rio Grande, Nicole Seguin, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel,

ed., 1994), p778-781. Three-Stream Bioprocess Fights Phosphorus in Wastewater

Effluent, ET June/July 94, p8.
Treatment of Metal Industrial Wastewater by Fly Ash and Cement Fixation, C. H. Weng and C. P. Huang, EE Nov./Dec. 94, p1470-1487.

Turning Up the Heat to Tame Sludge, ET Dec. 94/Jan. 95,

Use of Granular Activated Carbon Columns for Lead Removal, B. E. Reed and S. Arunachalam, EE Mar./Apr. 94, p416-436.

The Use of Iron Salts to Control Dissolved Sulfide in Districts' Trunk Sewers, Navnit A. Padival, William A. Kimbell and John A. Redner, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p743-750.

Vietnamese Market Opens to U. S. Firms, CE Apr. 94, p8.

Waste Minimization and Recycling by Microfiltration during Nitrocellulose Manufacturing, Lee Clapp, Jae K. Park and Byung J. Kim, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p98-105.

Wastewater Reclamation at Davenport, Washington, Doug-las L. Smith, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuv-

el, ed., 1994), p834-837.

Wastewater Treatment Optimization Model for Developing World II: Model Testing, S. L. Tang and K. V. Ellis, EE

May/June 94, p610-624.

Water Polishing by Constructed Wetland Ecosystems, Danuta Leszczynska and Andrew A. Dzurik, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p710-713.

Wastewater use

Austin's Strategy for Integrated Water Resource Planning, Tony T. Gregg, Maureen McReynolds and Eric Roth-stein, (Revenue Enhancement for Water and Wastewater Systems, Jerry R. Rogers, ed. and William P. Bullock, Jr., ed., 1994), p1-7.

A New Angle on Ground-Water Remediation, Vernon M. Reid, Kennon W. Wyatt and James A. Horn, CE Apr. 94,

p56-58.

trient Leaching from Alfalfa Irrigated with Municipal Wastewater, Scott F. Korom and Roland W. Jeppson, EE Sept./Oct. 94, p1067-1081.

Regional Wastewater Reuse in the Nueces Estuary, Kelly D. Payne and Samuel K. Vaugh, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), 7714–777.
Wastewater is No Waste if It's Reused, CE Dec. 94, p14.

Water: Ways to Save, CE Feb. 94, p21-22.

Cyclic Behavior of Partially Saturated Collapsible Soils Subjected to Water Permeation, Kenji Ishihara and Kenji Harada, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994).

For the Realization of Lunar Concrete, Hiroshi Kanamori, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p942-951.

In Rehab We Trust, Benjamin Lavon, CE Sept. 94, p73-74. In Kenab We Trust, Benjamin Lavon, C.E. Sept. 94, p1.3-14.
Kinetic Interpretations of First Reactivity Experiments on Lunar Basalt Samples, M. A. Gibson, C. W. Knudsen, D. J. Brueneman and H. Kanamori, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1167-1177.
Lunar Oxygen Production - A Maturing Technology, Carlton C. Allen, Gary G. Bond and David S. McKay, (Engineering, Construction, and Operations in Space IV.

neering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1157-1166.

Modified Oedometer for Arid, Saline Soils, Omar Saeed Baghabra Al-Amoudi and Sahel N. Abduljauwad, GT

Oct. 94, p1892-1897

A New Approach to Water Education: Children's Water Festivals, Darell D. Zimbelman and Brian R. Werner, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p762-765.

Observations on the Growth of an Internal Boundary Layer with a Lidar Technique, Chia R. Chu, Marc Parlange, William Eichinger and Gabriel Katul, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p519-529.

Reservoir Estimates for the Sulpicius Gallus Region, Bon-nie Cooper, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p889-896.

Elisk and Reliability of Water Resources Infrastructure and Engineering Approaches to Risk and Reliability Analy-sis, Richard Males, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p338-339.

Sealant Coats Building During Windy City Winter, CE Feb. 94, p77.

Water allocation policy

Balancing Water Allocation and Water Quality: The Model State Water Code, Ken C. Hall, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p469-472.

Climate Change, Jim Lambert, (), p352-354.

Cooperative Game Theory in Water Resources, Morris Israel, Jay R. Lund and Gerald T. Orlob, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p569-572.

Environment-Irrigation Trade-Offs and Risks, Norman J. Dudley, (Risk-Based Decision Making in Water Re-sources VI, Yacov Y. Haimes, ed., David A. Moser, ed.

and Eugene L. Stakhiv, ed., 1994), p280-294.

A Gaming Analysis of Drought-Coping Policy Options, James L. Henderson, William B. Lord and Russell L. Gum, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel,

ed., 1994), p620-623.

Integration of Water Rights and Network Flow Modeling in the Upper Snake River Basin, Donald K. Frevert, John W. Labadie, Roger K. Larson and Nancy L. Parker, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p577.

The Law of the Colorado River: Can It Cope With Severe Sustained Drought? Lawrence J. MacDonnell, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p628-

Reallocation Impacts of Eastern Water-Law Changes, William E. Cox, WR July/Aug. 94, p476-484.
Wichita Aquifer Gets Big Charge From Little Arkansas,

CE Sept. 94, p13.

Design Aspects of Modeling Reclaimed Water Use, Michael G. Heyl, David K. Ammerman and Jeffrey F. Payne, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p698-701.

Evapotranspiration by Young Florida Flatwoods Citrus Trees, Brian J. Boman, IR Jan./Feb. 94, p80-88.

Moisture and Suction in Sanitary Landfills in Semiarid Areas, G. E. Blight, J. M. Ball and J. J. Blight, EE Nov./ Dec. 92, p865-877.

Water Balance of Blue Nile River Basin in Ethiopia, Peggy A. Johnson and P. Douglas Curtis, IR May/June 94, p573-590.

Water chemistry

Progress in Understanding the Structure and Thermodynamics of Calcium Silicate Hydrates, Annemarie Meike, Maria Onofrei, Carol J. Bruton and Brian E. Viani, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2590-2596

Raw Water Cement-Mortar Lined Pipeline Corrosion A Case Study, Charles F. Anderson, Jr., (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p372-386.

U-234/U-238 Ratio: Qualitative Estimate of Groundwater Flow in Rocky Flats Monitoring Wells, J. C. Laul, (High Level Radioactive Waste Management, High Level Ra-dioactive Waste Program Committee, 1994), p2702-2708

Water Chemistry of Lead Corrosion Control, Leland L. Harms, Jonathan A. Clement and Michael R. Schock, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p34-41.

Water circulation

 Hydrodynamic Modeling of San Diego Bay, Parmeshwar
 L. Shrestha, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p140-144

Water conservation

Assessing Nassau County's Water Conservation Program, Mark Maimone and Michael Labiak, WR Jan./Feb. 94, p90-100.

Austin's Strategy for Integrated Water Resource Planning, Tony T. Gregg, Maureen McReynolds and Eric Roth-stein, (Revenue Enhancement for Water and Wastewater Systems, Jerry R. Rogers, ed. and William P. Bullock, Jr., ed., 1994), p1-7.

Brackish Groundwater and Urban Runoff: Source of Supply or Source of Problems? William R. Everest and Richard A. Reynolds, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry

N. Tuvel, ed., 1994), p770-773.

Conservation Before and After: The Impacts of Increasing Block Rates on a Fully Metered System, David LaFrance and Angela C. Montoya, (Water Policy and Manage-ment: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p798-801.

Conservation Measures in Urban Storm Water Management, Hormoz Pazwash and Harry N. Tuvel, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p408-411.

The Effect the Central Utah Project Will Have On Water Conservation in Utah, Douglas Gilmore, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p25-28.

Effectiveness of Retrofit in Multi-Family Apartments, Roger Durand, Richard C. Allison and Judith Durand, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p412-415.

Effectiveness of Water-Conservation Measures in Greater Athens Area, Helen Briassoulis, WR Nov./Dec. 94,

Hurricane Andrew and the Central and Southern Florida Project, James W. Vearil and Christopher T. Smith, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p597-606.

Monitoring Water Quality and Use in Colorado, Henriette Emond, Jim C. Loftis, Terence Podmore and Forrest Leaf, (Water Policy and Management: Solving the Prob-lems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed.,

1994), p343-346.

Reclamation and Water Conservation, Craig R. Phillips, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p573-576.

Statistical and GIS Tools for Assessing Water Conservation Effects, Pen C. Tao, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry

N. Tuvel, ed., 1994), p416-419.

Surface Water Withdrawal Permits Programs for Humid Regions, J. Wayland Eheart, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p529-532.

Transbasin Diversions: Trends in State Legislation, George William Sherk, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuv-

el, ed., 1994), p537-540.

Using A Risk-Based Relative Position Analysis to Initiate Water Conservation Measures, Chris Basford and Ron Harris, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p810-813.

Water and Wildlife Enhancement with Land Retirement, Earl Ekstrand and Richard Johnson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p541-544.

Water Conservation and Delivery Flexibility in the Imperi-al Irrigation District Through Lateral Interceptor Systems, Eduardo A. Latimer, Robert W. Charley, Todd Hunziker, Andrew A. Keller and Doug Welch, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p335-

Water: Ways to Save, CE Feb. 94, p21-22.

Water consumption

Adaptive Forecasting of Hourly Municipal Water Con-sumption, Chatree Homwongs, Tep Sastri and Joseph W. Foster, III, WR Nov./Dec. 94, p888-905.

Assessing Nassau County's Water Conservation Program Mark Maimone and Michael Labiak, WR Jan./Feb. 94,

Conservation Before and After: The Impacts of Increasing Block Rates on a Fully Metered System, David LaFrance and Angela C. Montoya, (Water Policy and Manage-ment: Solving the Problems, Darrell G. Fontane, ed. and

Harry N. Tuvel, ed., 1994), p798-801.

Drinks Are On the House, CE Nov. 94, p8.

Effectiveness of Water-Conservation Measures in Greater

Athens Area, Helen Briassoulis, WR Nov./Dec. 94,

Statewide Consumptive Use Estimates, T. Teegarden, L. Pochop, G. Kerr and R. Delaney, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p485-488.

Statistical and GIS Tools for Assessing Water Conservation Effects, Pen C. Tao, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry

N. Tuvel, ed., 1994), p416-419.

Utilizing Coordinated Billing and Metering Systems Anal-ysis to Enhance Utility Revenue on a Shared Revenue Basis, Randy P. Schuler, (Revenue Enhancement for Water and Wastewater Systems, Jerry R. Rogers, ed. and William P. Bullock, Jr., ed., 1994), p15-23.

Air Entrapment and Water Infiltration in Two-Layered Soil Column, H. Latifi, S. N. Prasad and O. J. Helweg, IR

Sept./Oct. 94, p871-891.

Characterization of a Desert Soil Sequence at Yucca Mountian, NV, William R. Guertal, Alan L. Flint, Lon L. Hofmann and David B. Hudson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2755-2763.

Comparison of Rock Correction Methods for Compaction

of Clayey Soils, Sandra L. Houston and Kenneth D. Walsh, GT Apr. 93, p763-778. Electrical Properties of Topopah Spring Tuff as a Function of Saturation, Jeffery J. Roberts and Wunan Lin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2112-2120.

Evaluation and Control of Collapsible Soils, Adnan A. Basma and Erdil R. Tuncer, GT Oct. 92, p1491-1504.

Hydrologic Property Alterations Due to Elevated Temperatures at Yucca Mountain, A. L. Flint, M. H. Nash and M. S. Nash, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2101-2105.

Modeling a Ponded Infiltration Experiment at Yucca Mountain, NV, David B. Hudson, Alan L. Flint and William R. Guertal, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Com-

mittee, 1994), p2168-2174.

Penetration Resistance Value along Compaction Curves, Alain G. Faure and José D. Viana Da Mata, GT Jan. 94, p46-59.

Saturation Levels and Trends in the Unsaturated Zone, Yucca Mountain, Nevada, Philip H. Nelson, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2774-2781.

Shallow Infiltration Processes in Arid Watersheds at Yucca Mountain, Nevada, Lorraine E. Flint, Alan L. Flint and Joseph A. Hevesi, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Com-

mittee, 1994), p2315-2322.

Spatial Distribution of Potential Near Surface Moisture Flux at Yucca Mountain, Alan L. Flint and Lorraine E. Flint, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2352-2358.

Verification of A 1-Dimensional Model for Predicting Shallow Infiltration at Yucca Mountain, Joseph A. Hevesi, Alan L. Flint and Lorraine E. Flint, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2323-2332.

Changing Conditions and Water Elections, Charles H. Lawrance, James M. Stubchaer and Jon A. Ahlroth, WR July/Aug. 94, p458-475.

Command Area Water Demands. I: Validation and Calibration of UCA Model, Seigo Yamashita and Wynn R. Walker, IR Nov./Dec. 94, p1025-1042.

Command Area Water Demands. II: Water-Demand Func-tion, Seigo Yamashita and Wynn R. Walker, IR Nov./

Dec. 94, p1043-1055.

Demand-Driven Operation of Reservoirs Using Uncertainty-Based Optimal Operating Policies, Haralambos V. Vasiliadis and Mohammad Karamouz, WR Jan./Feb. 94, p101-114.

Downstream Control Algorithm for Irrigation Canals, Fubo Liu, Jan Feyen and Jean Berlamont, IR May/June 94,

p468-483

Evaluation of the Water Supply Potential of the Floridian Aquifer in Seminole County, Florida, Lee P. Wiseman, Robert P. Schreiber, Ricardo Diaz and Charles J. Voss, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p600-603.

Fort Bend County Surface Water Supply Study, Martha F. Juch and David E. Winslow, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed.

and Harry N. Tuvel, ed., 1994), p214-217

The Implementation of a Comprehensive Water and Wastewater Utility Development Fee Process to Allocate the Cost of New Development to the Beneficiaries, Kenneth M. Needham and Joyce Kinnear, (Revenue Enhancement for Water and Wastewater Systems, Jerry R. Rogers, ed. and William P. Bullock, Jr., ed., 1994), p24-30.

Method for Estimating Efficiency in Spanish Irrigation Systems, Wolfgang Krinner, Angel García and Federico

Estrada, IR Sept./Oct. 94, p979-986.

Optimal Capacity-Expansion Planning in Multiaquifer Sys-tems, Hakan Başagaoğlu and Hasan Yazıcığıl, WR Nov./Dec. 94, p836-856.

Performance of Integrated Municipal Water System During Drought, Radwan A. Al-Mubarak Al-Weshah and Doug-

las T. Shaw, WR July/Aug. 94, p531-545.
Reallocation Impacts of Eastern Water-Law Changes, William E. Cox, WR July/Aug. 94, p76-6484.
Recreating a Process: The West Georgia Regional Water Supply Plan, Ken Hall, David Vaughn and Jim Cooley, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p493-496.

Salt River Project Strategic Water Resource Plan, Harold W. Thomas and Mark A. Emelity, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p234-237

The San Gorgonio Pass Water Project, Richard B. Bell, Aladdin Shaikh and Stephen P. Stockton, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p73-76.

Scada System Requirements for Optimum Pumping, Vilas Nitivattanannon, Elaine C. Sadowski and Rafael G. Quimpo, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p110-

Water Policy Change, Implications for Pyramid Lake, John W. Fordham, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuv-

el, ed., 1994), p501-504.

Water-Supply Operations during Drought: Continuous Hedging Rule, Jhih-Shyang Shih and Charles ReVelle, WR Sept./Oct. 94, p613-629.

2D Finite Element Modelling of Flooding Due to River Bank Collapse, L. D'Alpaos, A. Defina and B. Matticchio, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p60-71.

Estimating Ground Snow Loads Using Local Climatologiestimating Ground Show Local Chinaciongrical Data, Kenneth J. Fridley, Kathy A. Roberts and J. Bryan Mitchell, ST Dec. 94, p3567-3576.

Measuring Water in Trapezoidal Canals, Zohrab Samani

and Henry Magallanez, IR Jan./Feb. 93, p181-186.

Study for Deepening of the Martin Garcia Channels at Rio de la Plata, Uruguay, D. W. Yang and J. Bonasia, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1091-

Water discharge

Characterization of Incised Channel Development, Chester Watson, Daniel Gessler and Ronald R. Copeland, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p969-973.

Reducing Discharges from San Francisco to the Bay, James J. Jordan and Sangeeta Goyal, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed.

and Harry N. Tuvel, ed., 1994), p842-845

Reservoir Operation by the Use of an Expert System, Tiao J. Chang and David Moore, (Hydraulic Engineering '94, V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p97-104.

Spring Deposits and Late Pleistocene Ground-Water Levels in Southern Nevada, Jay Quade, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p2530-2537.

Structure of River Turbulence Behind Warm Water Dis-charge, Vladimir I. Nikora, Paweł Rowiński, Aleksander Suchodolov and Dariusz Krasuski, HY Feb. 94, p191-

Water distribution

Canal-Control Needs: Example, A. J. Clemmens, G. Sloan and J. Schuurmans, IR Nov./Dec. 94, p1067-1085.

Command Area Water Demands. I: Validation and Calibration of UCA Model, Seigo Yamashita and Wynn R. Walker, IR Nov/Dec. 94, p1025-1042.

Control of Microbial Water Quality in the Little Rock, Arkansas Distribution System, Bruno Kirsch, Jr., Craig Noble, Christopher H. Yu, Blaise J. Brazos and John T. O'Connor, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p58-65.

Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994, 0-7844-

0031-8, 825pp.

Data Management for Large-Scale Water-Distribution Op-timization Systems, S. Pezeshk, WR Jan. Feb. 94, p116-120

Designing Optimal Reliable Multiquality Water Supply Systems, Avi Ostfeld and Uri Shamir, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p270-274.

Determining Optimal Parameter Dimensions for Water Distribution Network Models, Keshaw N. Mallick, Kevin E. Lansey and Kevin S. Tickle, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p758-761.

Goal Programming Model for Distributing and Blending Desalinized Water, Abdulaziz S. Alidi and Taqi N. Al-

Faraj, WR May/June 94, p267-275.

Graphical Network Model Simplifies Water Analysis, Michael D. Larkin, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p296-

How to Improve Control of Flow and Reduce Cavitation, Ergun Bakall, Michael T. Stift and Paul W. Johnson, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Doug-

las H. Wegener, ed., 1994), p89-103.

Hydraulic Analysis of the Water Distribution System, Vail Valley Consolidated Water District, Vail, Colorado, Mark Rosser and Kevin W. McBrien, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p452-472.

Hydraulic Conductivity of Compacted Clay Frozen and Thawed in Situ, Craig H. Benson and Majdi A. Othman, GT Feb. 93, p276-294.

Incorporating Economic Analysis in Irrigation Design and Management, Ujjayant Chakravorty and James Roumasset, WR Nov./Dec. 94, p819-835.

An Integrated Approach to the Real-Time Control of Water Supply and Distribution Systems, Chun-hou Orr and Bryan Coulbeck, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p850-854.

Large-scale Modeling of a Water-Distribution System, Christopher T. Stern, CC May 94, p1-7.

Measuring and Modeling Chlorine Propagation in Water Distribution Systems, Robert M. Clark, Walter M. Grayman, James A. Goodrich, Rolf A. Deininger and Kenneth Skov, WR Nov./Dec. 94, p871-887.

Methods for Risk and Reliability Analysis, Larry W. Mays, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene

L. Stakhiv, ed., 1994), p26-44.

Modeling Chlorine Residuals in Drinking-Water Distribution Systems, Lewis A. Rossman, Robert M. Clark and Walter M. Grayman, EE July/Aug. 94, p803-820.

Modeling Pipe Networks Dominated by Junctions, Don J. Wood, L. Srinivasa Reddy and J. E. Funk, HY Aug. 93,

p949-958.

Optimal Operation of Ground-Water Supply Distribution Systems, S. Pezeshk, O. J. Helweg and K. E. Oliver, WR Sept./Oct. 94, p573-586.

Optimal Pump Operations Considering Pump Switches, Kevin E. Lansey and Kofi Awumah, WR Jan./Feb. 94,

Optimal Rehabilitation Model for Water-Distribution Systems, Joong Hoon Kim and Larry W. Mays, WR Sept./ Oct. 94, p674-692.

Parameter Estimation in Water-Distribution Systems by Least Squares, R. S. N. Datta and K. Sridharan, WR

July/Aug. 94, p405-422.

Performance of Integrated Municipal Water System During Drought, Radwan A. Al-Mubarak Al-Weshah and Douglas T. Shaw, WR July/Aug. 94, p531-545.

Policy on Private Water Sales in Rural Ghana, Fred O.

Boadu, WR Nov./Dec. 94, p944-961.

Predicting Pipe Failure Effects in Water Distribution Networks, P. W. Jowitt and Chengchao Xu, WR Jan./Feb. 93, p18-31.

Progression of Computer Applications in Water Supply and Distribution Systems, Chun-Hou Orr, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p622-

Redundancy-Constrained Minimum-Cost Design of Water-Distribution Nets, Heekyung Park and Jon C. Liebman, WR Jan./Feb. 93, p83-98.

Reliability Analysis of a Multi-Reservoir Water Distribu tion System, Shu-li Yang, Nien-Sheng Hsu, Peter W. F. Louie and William W-G. Yeh, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p855-858.

Reliability Analysis of Water Distribution Systems, Rafael G. Quimpo, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p45-55.

Reliability Analysis of Water-Distribution Systems, Rajesh Gupta and Pramod R. Bhave, EE Mar./Apr. 94, p447-

Remote Sensing Pipeline Rehabilitation Methodologies Based Upon the Utilization of Infrared Thermography, Gary J. Weil, Richard J. Graf and Leann M. Forister, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p173-181.

Risk and Reliability of Water Resources Infrastructure and Engineering Approaches to Risk and Reliability Analysis, Richard Males, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p338-339.

Risk Management Strategies for Natural, Manmade, and Technological Hazards, Benjamin F. Hobbs, (), p348-

Selecting Controls for Water Distribution Systems, J. Paul Tullis, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p43-61.

Soil Water Model for Evaluating Water Delivery Flexibili-ty, Sophie Lamacq and Wesley W. Wallender, IR July/

Aug. 94, p756-774.

The Use of SCADA for Real-time Calculation and Monitoring for CT Compliance at the Ralph D. Bollman Water Treatment Plant, Peter Schoemann and Peter Martin, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2112-2123.

Water Conservation and Delivery Flexibility in the Imperial Irrigation District Through Lateral Interceptor Systems, Eduardo A. Latimer, Robert W. Charley, Todd Hunziker, Andrew A. Keller and Doug Welch, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p335-

Water Infrastructure Risk Ranking and Filtering Method, Tomas Dolezal, Yacov Y. Haimes and Duan Li, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Sta-

khiv, ed., 1994), p56-72.

Water-Supply Operations during Drought: Continuous Hedging Rule, Jhih-Shyang Shih and Charles ReVelle, WR Sept./Oct. 94, p613-629.

Water flow

A-Tough: A Multimedia Fluid-Flow/Energy-Transport Model for Fully-Coupled Atmospheric-Subsurface Inter-actions, Parviz Montazer, Dale Hammermeister and Joseph Ginanni, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2333-2340.

Air Entrainment and Bubble Behavior in Plunge Pools, Boualem Hadjerioua, Emmett M. Laursen, Margaret S. Petersen and Tony A. Rizk, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p989-993.

Analysis of Flow Along Anisotropic Fractures in Partially Saturated Media, J. S. Y. Wang and B. L. Cox, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1915-

Application of a Needle Probe in Measuring Local Parame-ters in Air-Water Flow, A. R. Zarrati and J. D. Hardwick, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed.,

1994), p296-300. Appropriateness of One-Dimensional Calculations for Repository Analysis, Roger R. Eaton, (High Level Radio-Waste Management, High Level Radioactive Waste Program Committee, 1994), p1492-1500.

Bias in Regression Estimates of Manning's n, Kenneth L. Wahl, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p727-731.

Bridge Pier Scour with Debris Accumulation, Bruce W. Melville and D. M. Dongol, HY Sept. 92, p1306-1310.

Clear-Water Scour around Bridge Pier Group, Nandana Vittal, U. C. Kothyari and Morteza Haghighat, HY Nov. 94, p1309-1318. Drop Height Influence on Outlet Scour, Frederick K.

Doehring and Steven R. Abt, HY Dec. 94, p1470-1476. Effect of Fractures on Repository Dryout, Roger R. Eaton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994),

p2442-2449. Finite-Volume Two-Dimensional Unsteady-FLow Model for River Basins, D. H. Zhao, H. W. Shen, G. Q. Tabios, III, J. S. Lai and W. Y. Tan, HY July 94, p863-883.

Furrow Advance-Rate Solution for Stochastic Infiltration Properties, D. Renault and W. W. Wallender, IR May/ June 94, p617-633.

Green-Ampt Analysis of Wetting Patterns for Surface Emitters, Shu-Tung Chu, IR Mar./Apr. 94, p414-421.
Infiltration-Advance Equation for Finite Linear Source,

William O. Rasmussen, IR July/Aug. 94, p796-812. An Investigation of Turbulence in Open Channel Flow via Three-component Laser Doppler Mahalingam Balakrishnan and Clinton L. Dancey, (Fun-

damentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p159-175. Long Term Stability of Natural Glasses, Vladimír Knob-loch and Lumír Nachmilner, (High Level Radioactive

Waste Management, High Level Radioactive Waste Program Committee, 1994), p1066-1068.

Measuring Air Concentration in Flowing Air-Water Mixtures, Boualem Hadjerioua, Tony A. Rizk, Emmett M. Laursen and Margaret S. Petersen, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p289-295.

Observations of Water Movement in a Block of Fractured Welded Tuff, Falah Thamir, Edward M. Kwicklis, David Hampson and Steve Anderton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2020-2029.

Reflection and Transmission of Water Wave by Porous Breakwater, L. H. Huang and H. I. Chao, WW Sept./Oct.

92, p437-452.

Unsaturated Flow Experiment with Phase Change—The Heat Pipe Effect, A. Izzeldin, E. Hanson and R. Boehm, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2475-2480.

Verification of a Three-Dimensional Model of Delaware Bay, K. W. Kim, B. H. Johnson and J. Gebert, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p574-578.

Void Fraction Measurement Techniques for Gas-Liquid Bubbly Flows in Closed Conduits; A Literature Review, Mahmood Naghash, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p278-288.

What is Computational Hydraulics? Angelos N. Findikakis, A. Blumberg, R. Schmalz and K. Bedford, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p482-486.

Water hammer

Eliminating Water Column Separation and Limiting Backspin at a 12,000-Horsepower Pumping Plant, Paul Otter, David Hoisington and David Raffel, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p435-444.

Filling of Pipelines with Undulating Profiles, Chyr Pyng Liou and William A. Hunt, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed.,

1994), p104-118.

Hydraulic Transients in Two Acid Transfer Lines, Muin M. Baasiri, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p129-151.

Laplace Valve Stroking for Complex Piping Systems, Don-ald Serpas, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p939-

Numerical Comparison of Pipe-Column-Separation Mod-els, Angus R. Simpson and Anton Bergant, HY Mar. 94, p361-377.

Sudden Pressure Drop and Pipeline Failure - Case Studies, E. John List, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p339-355.

Water infiltration

Air Entrapment and Water Infiltration in Two-Layered Soil Column, H. Latifi, S. N. Prasad and O. J. Helweg, IR Sept./Oct. 94, p871-891.

Failures of Residential Building Basements in Ohio, C. F. Diaz, F. C. Hadipriono and S. Pasternack, CF Feb. 94,

p65-80.

Infiltration-Advance Equation for Finite Linear Source, William O. Rasmussen, IR July/Aug. 94, p796-812.

Liquid Infiltration Through the Boiling-Point Isotherm in a Desiccating Fractured Rock Matrix, O. M. Phillips, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2189-2196.

Modeling Infiltration Into a Tuff Matrix From a Saturated Vertical Fracture, Clifford K. Ho, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1897-1904.

Moisture Migration through Basement Walls, Robert W. Day, CF Feb. 94, p82-86.

Observations of Water Movement in a Block of Fractured Welded Tuff, Falah Thamir, Edward M. Kwicklis, David Hampson and Steve Anderton, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2020-2029.

Results of Air-Permeability Testing in a Vertical Borehole at Yucca Mountain, Nevada, G. D. LeCain and J.N. Walker, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p2782-2788.

736

The Role of Fracture Coatings on Water Imbibition Into Unsaturated Tuff, Vijay S. Chekuri, Scott W. Tyler and John W. Fordham, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1891-1896.

Verification of A 1-Dimensional Model for Predicting Shallow Infiltration at Yucca Mountain, Joseph A. Hevesi, Alan L. Flint and Lorraine E. Flint, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2323-2332.

Design Considerations for Use of Wedge Wire Screens at Surface Water Intake Structures, Mahmood Naghash and Adnan M. Alsaffar, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p452-456.

Artificial Recharge of Aquifers, Charles L. Joy, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p376-383

Balancing Water Allocation and Water Quality: The Model State Water Code, Ken C. Hall, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p469-472.

Reallocation Impacts of Eastern Water-Law Changes, William E. Cox, WR July/Aug. 94, p476-484.

Water level fluctuations

Benefits of Hazard Mitigation Planning to Reduce Shoreline Impacts Due to Great Lakes Water Level Management Fluctuations and Severe Storms, Robert Nairn and Darryl Hatheway, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

Seepage through Dike Walls of the Chicago Confined Disposal Facility, D. D. Reible, S. A. Savant-Malhiet, L. J. Thibodeaux, K. T. Valsaraj and T. E. Myers, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1490-1496.

1993 Mississippi Record Stages and Levee Failures, Sally McConkey, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p603-607

Analyzing Wave and Storm Surge Impacts from Hurricane Andrew on the Dade County Beach Erosion Control and Hurricane Protection Project, Kimberley A. Taplin and Jon M. Hubertz, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p587-596.

Countercurrent Jet Device, Willi H. Hager, HY Apr. 94.

Design and Execution of Hydrodynamic Field Data Collection using Acoustic Doppler Current Profiling Equip-ment, Timothy L. Fagerburg and Thad C. Pratt, (Funda-mentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p530-538.

Development of the Tampa Bay Tidal Current Atlas, Kurt W. Hess, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p489-499.

Downstream Control Algorithm for Irrigation Canals, Fubo Liu, Jan Feyen and Jean Berlamont, IR May/June 94, p468-483.

Evolutionary Fourier Analysis of Wave Data, Leon E. Borgman, Mihail Petrakos and Chao Li, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p708-725.

Interactive Models for the Regulation of Lake Ontario, Anthony J. Eberhardt, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

p105-109.

Joint Probability of Superelevated Water Levels and Wave Heights at Duck, North Carolina, Douglas A. Gaffney and Gregory L. Williams, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p905-917.

Prediction of Land Subsidence due to Ground-Water Use in Snow Country, Kazumasa Mizumura, HY Apr. 94, p448-460.

The Regulation of Lake Ontario During the Spring of 1993; a Period of Record Supplies, Anthony J. Eberhardt and Peter P. Yee, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p187-191.

Sensitivity of Great Lakes Forecasting System Nowcasts to Meteorological Fields and Model Parameters, William P. O'Connor and David J. Schwab, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p149-157.

Spring Deposits and Late Pleistocene Ground-Water Levels in Southern Nevada, Jay Quade, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p2530-2537.

Transbasin Diversions: Trends in State Legislation, George William Sherk, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p537-540.

Water-Level Control in Hydropower Plants, Oscar F. Jiménez and M. Hanif Chaudhry, EY Dec. 92, p180-193.

Canal-Control Needs: Example, A. J. Clemmens, G. Sloan and J. Schuurmans, IR Nov./Dec. 94, p1067-1085. Dormancy and Nondormancy Alfalfa Yield and Evapo-transpiration, J. C. Guitjens and M. T. Goodrich, IR Nov./Dec. 94, p1140-1146.

Method for Estimating Efficiency in Spanish Irrigation Systems, Wolfgang Krinner, Angel García and Federico Estrada, IR Sept./Oct. 94, p979-986.

Water management

Alameda Creek Water Resources Study, Terry L. Erlewine and Edward H. Stewart, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p17-20.

Benefits of Hazard Mitigation Planning to Reduce Shore-line Impacts Due to Great Lakes Water Level Management Fluctuations and Severe Storms, Robert Nairn and Darryl Hatheway, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p182-186.

Command Area Water Demands. I: Validation and Calibration of UCA Model, Seigo Yamashita and Wynn R. Walker, IR Nov./Dec. 94, p1025-1042.

Command Area Water Demands. II: Water-Demand Function, Seigo Yamashita and Wynn R. Walker, IR Nov./ Dec. 94, p1043-1055.

Conservation Measures in Urban Storm Water Manage ment, Hormoz Pazwash and Harry N. Tuvel, (Water Policy and Management: Solving the Problems, Darrell G.

Fontane, ed. and Harry N. Tuvel, ed., 1994), p408-411. Correlating Trihalomethane Data, Paul H. Hutton and Francis I. Chung, EE Jan./Feb. 94, p219-241.

Current Trends in Waterpark Development, Terry R. Barnhart, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p434-438.

Developing Economic Performance Information for Water Management Projects in North China, Ari M. Michelsen and Jona Bargur, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N.

Tuvel, ed., 1994), p641-644. Flushing Flows for the Water Manager, Robert T. Milhous, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

p226-229

Geographically Distributed Decision Support; The Tennes see Valley Authority (TVA) TERRA System, Rene F. Reitsma, Peter Ostrowski, Jr. and Stephen C. Wehrend, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994). p311-314.

Hurricane Andrew and the Central and Southern Florida Project, James W. Vearil and Christopher T. Smith, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p597-606.

Missouri River Least Tern and Piping Plover Model Development, R. Tressler, R. Fairbanks, D. Latka, J. Glassley, K. Engel and J. Rude, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry

N. Tuvel, ed., 1994), p750-753.

Missouri River Master Manual Review and Update, Lawrence J. Cieslik and Roy F. McAllister, Jr., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p673-676.

Fontane, ed. and Harry N. 11vel, ed., 1994), po73-676.
Moisture Migration through Basement Walls, Robert W.
Day, CF Feb. 94, p82-86.
Monitoring Water Quality and Use in Colorado, Henriette
Emond, Jim C. Loftis, Terence Podmore and Forrest
Leaf, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p343-346.

Public Involvement in Water Resources Management, James W. Vearil, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N.

Tuvel, ed., 1994), p445-448.

Reclamation and Water Conservation, Craig R. Phillips, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p573-576.

Salt River Project Strategic Water Resource Plan, Harold W. Thomas and Mark A. Emelity, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p234-237.

Utilizing Coordinated Billing and Metering Systems Anal-ysis to Enhance Utility Revenue on a Shared Revenue Basis, Randy P. Schuler, (Revenue Enhancement for Water and Wastewater Systems, Jerry R. Rogers, ed. and William P. Bullock, Jr., ed., 1994), p15-23.

Water Policy and Management: Solving the Problems, Dar-rell G. Fontane, ed. and Harry N. Tuvel, ed., 1994, 0-

7844-0020-2, 900pp.

Conservation Before and After: The Impacts of Increasing Block Rates on a Fully Metered System, David LaFrance and Angela C. Montoya, (Water Policy and Manage-ment: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p798-801.

Solving Collections Problems to Increase Revenue: The Houston Experience, 1988-1993, Karen Philippi, (Revenue Enhancement for Water and Wastewater Systems, Jerry R. Rogers, ed. and William P. Bullock, Jr., ed.,

1994), p8-14

Utilizing Coordinated Billing and Metering Systems Anal-ysis to Enhance Utility Revenue on a Shared Revenue Basis, Randy P. Schuler, (Revenue Enhancement for Water and Wastewater Systems, Jerry R. Rogers, ed. and William P. Bullock, Jr., ed., 1994), p15-23.

Water pipelines
Chemical Cleaning Process for Water Pipe Systems, Craig
Edstrand, Allen Hieatt and Jerome Ludwig, (Hydraulies
of Pipelines, Deon T. Fowles, ed. and Douglas H.
Wegener, ed., 1994), p288-295.
Effect of Temperature Changes on Water-Main Breaks,
Ahmad Habibian, TE Mar./Apr. 94, p312-321.
Pipe Utility Evaluations With the Aid of GIS, Raymond A.
Pittman, (Hydraulie Engineering '94, George V.
Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p242246.

Steel Raw Water Pipeline Design Development, Steven J. Troch, Roger Strube and Lynn Hill, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p473-491.

Water policy Global-Climate Model, ET Aug./Sept. 94, p11.

The Great Lakes Initiative: Dollars Down the Drain, Aleesa L. Bell and Fredric P. Andes, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p110-120.

Transbasin Diversions: Trends in State Legislation, George William Sherk, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuv-

el, ed., 1994), p537-540.

Water Policy and Management: Solving the Problems, Dar-rell G. Fontane, ed. and Harry N. Tuvel, ed., 1994, 0-7844-0020-2, 900pp.

Water Resources Planning and Management: Now & Twenty Years from Now, Kyle E. Schilling, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p219-

World Bank Update: In Deep Water, Francois M.I. Lam-pietti, WP Special issue 94, p26-30.

Mater pollution

Anaerobic Biodegradation of Chloroform under Methanogenic Conditions, Devesh, Munish Gupta, Makram T. Suidan and Gregory D. Sayles, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p609-616.

Arsenic Removal by Manganese Greensand Filters, Thon Phommavong and T. Viraraghavan, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p646-653.

Arsenic Removal Via Softening, Laurie McNeill and Marc

Edwards, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p640-645.

Contaminant Fate and Transport Model in Pool-and-Riffle Streams, Il Won Seo, Dae Young Yu and Jae-Hyung Lee, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p165-169.

Contribution of Waterborne Radon to Home Air Quality, Arun K. Deb, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed.,

1994), p662-669.

Development of a Model for the ABF/AS Process, Julian Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p686-693.

Engineered Barrier Environment, Yucca Mountain, Dale G. Wilder, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee,

1994), p1179-1187.

A model to describe the fate of agricultural pollutants, A. Pinheiro and B. Caussade, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p170-174.

Modeling Horizontal Round Buoyant Jets in Shallow Water, A. J. Johnston, C. R. Phillips and R. E. Volker,

HY Jan. 94, p41-59.

Nation-Wide Bromide Occurrence and Bromate Formation Potential in Drinking Water Supplies, P. Westerhoff, M. Siddiqui, J. Debroux, W. Zhai, K. Ozekin and G. Amy, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p670-

NCASI Experiment Related to Validation of Equilibrium Partitioning (EP) Theory, Steven W. Hinton, (Critical Issues in Water and Wastewater Treatment, Joseph N.

Ryan, ed. and Mare Edwards, ed., 1994), p737-742. Nonpoint-Pollution Model Sensitivity to Grid-Cell Size, Baxter E. Vieux and Scott Needham, WR Mar./Apr. 93,

p141-157.

Nowcast System Development for the Straits of Florida, Christopher N. K. Mooers and Dong-Shan Ko, (Estua-rine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p158-171.

NPDES Storm Water Permit Compliance at Air Force In-stallations, Paul Makowski and Marvin Smith, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1224-1228.

Picturing Pollution, Kevin G. Coulton, CE Mar. 94, p62-

A Predictive Model of Sewage Pumpout Station Use Among Chesapeake Bay Boaters, Stuart Cottrell and Alan Graefe, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p59-68.

Rehabbing for Remediation, David Banton and Robert Anderson, CE Mar. 94, p64-65.

Removal of Bromate After Ozonation by Electron Beam Irradiation, M. Siddiqui, G. Amy, W. Cooper, C. Kuruz and T. Waite, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p654-661.

738

The Sensitized Photocatalysis of a Mixed Reactant System nel Senstizzet Fronceamysts of a Mixed Reactain System of 4-Chlorophenol and 4-Nitrophenol, Melissa S. Dieck-mann, Kimberly A. Gray and Prashant V. Kamat, (Criti-cal Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p726-732.

Trihalomethanes in Chlorinated Sacramento-San Joaquin Delta Drinking Water Simulated with the EPA WTP-THM Model, Russ T. Brown, Doug Brewer, Doug Owen and Zaid Chowdhury, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p492-500.

Water pollution control

Computerized Building Settlement Analyses for a Contaminated Groundwater Remediation Project, James A. McKelvey, III. (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1228-1235.

Deicing Denver, David S. Backer, Don Smith and Craig E. Hebber, CE, Ishi M. 45, 65, 65.

Habben, CE July 94, p56-59.

Effects of Molecular Oxygen and pH on the Adsorption of Aniline to Activated Carbon, Peter Fox and Kamalesh Pinisetti, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p617-623.

EPA Orders National Strategy on Sewer Overflows to Ease Water Pollution, NE Aug. 94, p15.

Field Test of Stormwater Best Management Practices, S. L. Yu, S. L. Barnes, R. J. Kaighn, Jr. and S. L. Liao, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p508-515.

How Many Observation Wells Does it Take to Find a Groundwater Contamination Plume? Bruce R. James and Steven M. Gorelick, (Computing in Civil Engineering,

Khalil Khozeimeh, ed., 1994), p197-199.

SEASHELL - Software for the Simulation of Transport and Fate of Pollutants in Coastal Waters, Venkat S. Kolluru and Malcolm L. Spaulding, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p624-640.

Third Lake Watershed Assessment and Action Plan, Carey M. Brand, Gary E. Raasch and Marion E. Kessy, (Hy draulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p257-261.

Water pressure

Dynamic Lateral Pressures Due to Saturated Backfills on Rigid Walls, Isao Ishibashi, Makoto Osada and Tatsuo

Uwabe, GT Oct. 94, p1747-1767.

Filling of Pipelines with Undulating Profiles, Chyr Pyng Liou and William A. Hunt, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p104-118.

Hydraulic Analysis of an HDPE Water Supply Pipeline, Yifan Zheng and Adnan M. Alsaffar, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p318-328.

Nonlinear Hydrodynamic Pressures on Arch Dam Faces, Bang-Fuh Chen and Ing-Sen Yuan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p411-415.

Sudden Pressure Drop and Pipeline Failure - Case Studies, E. John List, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p339-355.

Water pricing

Conservation Before and After: The Impacts of Increasing Block Rates on a Fully Metered System, David LaFrance and Angela C. Montoya, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p798-801.

The Cost of Water Reuse is a Benefit to All, Richard W. Harris and Jacqueline A. Millet, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed.

and Harry N. Tuvel, ed., 1994), p706-709.

Water purification

Ground-Water Treatment: Surfactants Surface, ET Aug./ Sept. 94, p10-11.

Performance Evaluation of Ceramic Filter Candles, Malay Chaudhuri, Sanjeev R. Verma and Anirban Gupta, EE Nov./Dec. 94, p1646-1651.

Water Engineers Challenged to Take Lead on Sustainable-Development Track, CE Aug. 94, p64.

Water quality

Agroforestry Drainage Management Model. III: Field Salt Flow, F. F. Karajeh and K. K. Tanji, IR Mar./Apr. 94, p397-413.

The Application of Streamflow Duration Curves in Water Resources Engineering, Richard M. Vogel and Neil M. Fennessey, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p201-204.

Application of WQMAP to Upper Narragansett Bay, Rhode Island, J. C. Swanson and D. L. Mendelsohn, (Es-tuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p656-678.

Assessing Roughing Filtration Design Variables, Jennifer O. Cole, Catherine Westersund and M. Robin Collins, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p170-

Assessing Stormwater Impacts, G. Allen Burton, Jr., (Hy-Assessing Stormwater Impacts, G. Anen Butter, A., (17)-draulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), pl 198-1202.

Balancing Water Allocation and Water Quality: The Model

State Water Code, Ken C. Hall, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p469-472.

Bromine Distribution Factors in THM Formation, Paul H. Hutton and Francis I. Chung, WR Jan./Feb. 94, p1-16.

Centralized Government Control: A Bad Idea, Paula P. Easley, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p53-78.

Chemical Cleaning Process for Water Pipe Systems, Craig Edstrand, Allen Hieatt and Jerome Ludwig, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H.

Wegener, ed., 1994), p288-295.

Clean Water Act Reauthorization: The States' Perspective, Roberta Haley Savage, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p34-52.

Clean Water is not Enough, James R. Karr, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p79-95.

Coastal Eutrophication and Temperature Variation, Jacques Ganoulis, Stilianos Rafailidis, Istvan Bogardi, Lucien Duckstein and Istvan Matyasovszky, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p317-330.

Combined Stormwater Drainage and Treatment, Jorge Romero-Lozano, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

p1229-1231.

Comparison of Eulerian-Lagrangian, Random Walk and Hybrid Methods of Modeling Pollutant Transport, Jeffrey C. Moeller and E. Eric Adams, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p609-623.

Conservation Measures in Urban Storm Water Management, Hormoz Pazwash and Harry N. Tuvel, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p408-411.

Contaminated Dredged Sediment Disposal Criteria, G. Fred Lee and Anne Jones-Lee, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p121-130.

Controlling Lead and Copper Corrosion and Sequestering of Iron and Manganese, Jonathan A. Clement, Michael Schock and Darren Lytle, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p1-8.

Correlating Trihalomethane Data, Paul H. Hutton and Francis I. Chung, EE Jan./Feb. 94, p219-241.

Costs and Benefits of Meeting the San Francisco Bay Copper Objective by Regulating Small Treatment Plants, Steven X. McHaney, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1232-1236.

- A Coupled GIS-Water Quality Modeling System, Chen-Yu Cheng, J. F. Atkinson and J. V. DePinto, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p247-251.
- Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994, 0-7844-0031-8, 825pp.
- A Decision Support System for Reassessing the Operation of the Chungju Reservoir System, Darrell G. Fontane, Soon Bo Shim and H. S. Lee, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p29-302.
- Denver's Direct Potable Water Reuse Demonstration Project, William C. Lauer, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p657-660.
- Description of the Application of Goal Programming for Selective Withdrawal Structure Operation, D. G. Fontane and M. L. Schneider, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p400-403.
- Development of Long-Term Three-Dimensional Hydrodynamics in Long Island Sound for Use in Water Quality Modeling, Richard A. Schmalz, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1316-1320.
- Differentiating the Experience of Boater "Publics", Ellen B. Drogin, Andrew Holdnak, Alan R. Graefe and James M. Falk, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p132-139.
- Drawing Conclusions as to Environmental Regulation, William Whipple, Jr., Harlan Agnew, Michael L. Clar, Robert Fiehweg, Tad Foster, Howard Holme, Marshall Jennings, Jonathan Jones, Joan Lee, Jan Rosholt, Charles Sain, Kyle Schilling, Earl Shaver and Don Woodward, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p.258-271.
- Dry Weather Stormwater Management Yakima, WA, John R. Genskow, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p123-126.
- East River Modeling of Water Quality for Multiple-Project Assessments, Guy Apicella, Robert Norris, Johanna Newton, Walter Ewald and Angelika Forndran, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p235-248.
- Effect of Aggregation on *Vibrio Cholerae* Inactivation, Robert M. Clark, Eugene W. Rice, Bennett K. Pierce, Clifford H. Johnson and Kim R. Fox, EE July/Aug. 94, p875-887.
- Effect of Saline Irrigation Water on Tree Growth, Ghulam Hussain and Otto J. Helweg, IR Sept./Oct. 94, p970-978.
- Effects from Thin-Layer Disposal of Dredged Material on Water Quality in Mississippi Sound, Susan Ivester Rees and Pace Wilber, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1481-1489.
- Effects of Climate Change on Water Quality, G. K. Meyer and G. T. Orlob, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p275-278.
- The Effects of NOM and Coagulation on Copper Corrosion, John P. Rehring and Marc Edwards, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Marc Edwards, ed., 1994), p26-33.
- Environmental Modeling of Coastal Wetlands, Lisa C. Roig and Robert A. Evans, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p522-535.
- Environmentally Compatible Marinas the Major Issues that Need to be Addressed in Designing New and Retrofitting Existing Marinas, Daniel S. Natchez, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p49-58.

- Evaluation and Management of Non-Point Source Pollutants in the Lake Tahoe Watershed, G. Fred Lee and Anne Jones-Lee, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p516-523.
- Watus, Gu., 1994, 1970-23.
 Kealuation of Enhanced Coagulation for DBP Control, Richard J. Miltner, Sheila A. Nolan, Marcus J. Dryfuse and R. Scott Summers, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p484-491.
- Flow and Chloride Transport in the Tidal Hudson River, NY, Lawrence A. Weiss, Raymond W. Schaffranek and M. Peter de Vries, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), 1200-1230.
- Fouling of Nanofiltration Membranes by Natural Organic Matter, Francis A. DiGiano, Anne Braghetta, James Nilson and Bruce Utne, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p320-328.
- From Crane Safety to Watershed Management, ASCE Board Adopts Five New Policies, NE July 94, p15.
- General Urban Runoff Model for Water Quality Investigations, Robert E. Pitt, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1213-1218.
- Genetic Algorithms and Neural Networks: Do Pluralized Techniques Hold Any Advantages for Designing Groundwater Quality Assurance Systems? J. Wayland Eheart, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p258-261.
- Good Software, and It's Free, Too, David Angelotti, CC June 94, p1-6.
- The Great Lakes Initiative: Dollars Down the Drain, Aleesa L. Bell and Fredric P. Andes, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), pl 110-120.
- Improvements to the Clean Water Act and Related Statutes, Howard Holme, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p233-257.
- Integration of Water Quantity and Quality in River Basin Network Flow Modeling, John W. Labadie, Darrell G. Fontane and Tewai Dai, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p61-64.
- Integration of Water Quantity and Quality Planning, Luiz A. Azevedo, Timothy K. Gates and Darrell G. Fontane, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p388-391.
- Interfacing GIS and Water Quality Models for Agricultural Areas, Vassilios A. Tsihrintzis, Hector R. Fuentes and Rao K. Gadipudi, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p252-256.
- Joint Pond-Wetland System Performance in Colorado, Ben Urbonas, Bao Vang and Jay Carlson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p384-387.
- Lake Michigan Diversion at Chicago, William H. Espey, Jr., Oscar G. Lara and Robert L. Barkau, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p175-181.
- The Light at the End of the Sewer: How Interested Parties Negotiated a Consensus Solution to the Combined Sewer Overflow Problem, David S. Bailey, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p204-210.
- Linking Hydrodynamic and Biogeochemical Transport Models for Estuarine and Coastal Waters, J. M. Hamrick, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p591-608.
- Long-Term Simulation of Decreased Acid Loading on Forested Watershed, Todd H. Rees and Jerald L. Schnoor, EE Mar./Apr. 94, p291-312.

Macro-Roughness Effects on Stream Reaeration, Douglas B. Moog and Gerhard H. Jirka, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p994-998.

Measuring and Modeling Chlorine Propagation in Water Distribution Systems, Robert M. Clark, Walter M. Grayman, James A. Goodrich, Rolf A. Deininger and Kenneth Skov, WR Nov./Dec. 94, p871-887

Modeling Chlorine Residuals in Drinking-Water Distribution Systems, Lewis A. Rossman, Robert M. Clark and Walter M. Grayman, EE July/Aug. 94, p803-820.

Modeling Hydrologic and Pollutant Transport Processes for Stromwater Runoff to Surface Waters, Leslie L. Shoemaker, Mohammed Lahlou, Andrew Stoddard and James Pagenkopf, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1208-1212.

Modeling Temperature Impacts on Salmon Survival, Jamie D. Anderson and Gerald T. Orlob, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p323-326.

Monitoring of Water Injection Dredging, Dredging Pollut-ed Sediment, W. G. Borst, Joh. G. S. Pennekamp, H. Goossens, A. Mullié, P. Verpalen, T. Arts, P. F. van Dreumel and W. D. Rokosch, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p896-905.

Monitoring Water Quality and Use in Colorado, Henriette Emond, Jim C. Loftis, Terence Podmore and Forrest Leaf, (Water Policy and Management: Solving the Prob-lems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed.,

1994), p343-346.

NPDES Storm Water Permit Compliance at Air Force In-stallations, Paul Makowski and Marvin Smith, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1224-1228.

Numerical Decomposition of Eulerian Residual Circulation in Long Island Sound, Richard A. Schmalz, Jr., (Estua-rine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p294-308.

Numerical Modeling of Advective and Diffusive Transport in the Rappahannock Estuary, Virginia, Kyeong Park and Albert Y. Kuo, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p461-474.

Object-oriented Model of Colorado River Salinity, Nancy E. Winter and Steven C. Chapra, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p392-395.

Optimal Groundwater Reclamation with Captial Costs, Teresa B. Culver and Christine A. Shoemaker, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p177-180

Ozonation as an Alternative to Mandatory Filtration, Dimitrios Katehis, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p384-391.

Partial Infeasibility Method for Chance-Constrained Aquifer Management, Nathan Chan, WR Jan./Feb. 94, p70-

Perspectives on Water Quality Regulation, J. David Holm, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p145-154.

Picturing Pollution, Kevin G. Coulton, CE Mar. 94, p62-63.

Pollution Susceptibility of Well-Mixed Tidal Basins, Joseph L. DiLorenzo, Rhomaios V. Ram, Poshu Huang and Tavit O. Najarian, WW July/Aug. 94, p404-422.

Predicting Sediment Yield in Storm-Water Runoff from Urban Areas, Thomas W. Haster and Wesley P. James, WR Sept./Oct. 94, p630-650.

Preface and Executive Summary, Howard Holme, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p1-14.

Protecting Human Health: Keeping Science in Risk Assessment and Balance in Risk-Based Regulations, Robert G. Tardiff, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p96-106.

Protecting the Great Lakes: Asking the Right Questions, Christopher Grundler, (National Water Resources Regu-lation: Where is the Environmental Pendulum Now?,

Howard Holme, ed., 1994), p107-109.

740

Public Perceptions of Fresh Water Issues, Robert E. O'Connor, Richard J. Bord and Ann Fisher, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p155-174.

Purpose and Perspective for the Conference: "National Water Resources Regulation - Where is the Pendulum Now?", Jonathan E. Jones, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p15-19.

QUAL2E Simulations of Pulse Loads, Raymond Walton and Mary Webb, EE Sept./Oct. 94, p1017-1031.

Reconstruction of Concentration Boundary Condition for Unsteady Pesticide Transport Modeling, Deborah J. Mossman and Nael Al Mulki, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p160-164.

Regulation of Flow Downstream of Weirs, Boualem Hadjerioua, Tony Rizk, Emmett M. Laursen and Gary

Hauser, HY Mar. 94, p347-360.

The Regulatory Pendulum: Has it Finally Come to Rest for CSO Control? Nancy J. Wheatley, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p187-197.

Restoration of Lakes and Canals in an Urban Park - Belle Isle, Michigan, Catherine Riseng, Douglas Denison and Bernard Fekete, (Marinas, Parks and Recreation Develpments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p261-270.

Risk-Based Environmental Priorities: What Priority? E. Donald Elliott and Alan B. Horowitz, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p24-33.

Roiled Waters: Water Politics in the 1990s, Teresa Austin, CE July 94, p49-51

Seepage through Dike Walls of the Chicago Confined Disposal Facility, D. D. Reible, S. A. Savant-Malhiet, L. J. Thibodeaux, K. T. Valsaraj and T. E. Myers, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1490-1496.

Simulating Water Supply Systems of the Raritan Basin, Michael Bennett, Marshall R. Taylor, Che-Hsun Wan and Daniel P. Loucks, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p433-436.

Start-ups, CE Sept. 94, p8.

The State (By State) of Water Quality, CE Mar. 94, p8.

Statistical Techniques for Assessing Water-Quality Effects of BMPs, John F. Walker, IR Mar./Apr. 94, p334-347.

Stormwater Regulation: The Local Perspective, Doug Harrison, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p177-186.

Stratified Flow in an Impounded Inland River, Emmet M. Owens and William R. Naumann, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p569-573.

Stream Water-Temperature Sensitivity to Weather and Bed Parameters, Bashar A. Sinokrot and Heinz G. Stefan, HY June 94, p722-736.

Surface Water Quality Modeling in the Rio Grande, Nicole Seguin, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p778-781.

Tailwater Fishery Management Using a Fish Bioenergetics Model, Ming Shiao, Gary Hauser, Gary Chapman, Bruce Yeager, Tom McDonough and Jim Ruane, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p45-48.

Testing Turbine Aeration for Dissolved Oxygen Enhancement, Tony L. Wahl, Jerry Miller and Doug Young, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed.,

1994), p425-434.

Trihalomethanes in Chlorinated Sacramento-San Joaquin Delta Drinking Water Simulated with the EPA WTP-THM Model, Russ T. Brown, Doug Brewer, Doug Owen and Zaid Chowdhury, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p492-500.

Understanding the Uses of History in Water Resources Planning and Management, Loretta C. Lohman, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p505-

508

Vadose-Zone Monitoring, Sanitary Treatment Plant Sludge-Drying Beds, Rocky Flats Plant, Golden, Colora-do, James R. Kunkel and J. Scott Thompson, (Water Pol-icy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p359-362.

Volatilization of Selected Organic Compounds from Quiescent Water, Jian Peng, Jatinder K. Bewtra and Nihar Biswas, EE May/June 94, p662-669.

Water and Wildlife Enhancement with Land Retirement, Earl Ekstrand and Richard Johnson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p541-544.

Water Chemistry of Lead Corrosion Control, Leland L. Harms, Jonathan A. Clement and Michael R. Schock, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p34-41.

Water Polishing by Constructed Wetland Ecosystems, Danuta Leszczynska and Andrew A. Dzurik, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p710-713.

Water Resources Planning and Management: Now & Twenty Years from Now, Kyle E. Schilling, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p219-

Water-Quality Data Management: Survey of Current Trends, Laurel Saito, Neil S. Grigg and Robert C. Ward,

WR Sept./Oct. 94, p587-612.

Waterfronts: GATEWAY to Your Community, Allyson Forsythe-Fiene, Robert D. Espeseth and Joseph T. O'Leary, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p449-459.

Wet Weather Issues in Receiving Systems: Can a Pendulum Swing Upstream? Edwin E. Herricks, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p168-

Where is the Pendulum Now? Do We Really Know? D. R. Wheeler, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p155-167

Why Design Storm Methods Have Become Unethical, William James, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1203-

Wind Lake Improvement Plan Dredging Project Wind Lake, Wisconsin, Robert W. Carr and Kathy Aron, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p141-144.

Water quality control

Achieving Adequate BMP's for Stormwater Quality Management, Anne Jones-Lee and G. Fred Lee, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p524-531.

Analysis of Biomass Distribution and Chemical Interacitions in Nitrifying Biofilms, Edna M. C. V. Flora, Joseph R. V. Flora, Makram T. Suidan and Byung J. Kim, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p305-312.

Artificial Recharge of Aquifers, Charles L. Joy, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p376-383.

Comparison of Biological and Chemical/Physical Iron Removal, Charlotte D. Smith and James F. Smith, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p74-81.

Control of Microbial Water Quality in the Little Rock, Arkansas Distribution System, Bruno Kirsch, Jr., Craig Noble, Christopher H. Yu, Blaise J. Brazos and John T. O'Connor, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p58-65.

Federal Water Regulations Lack Local Focus, CE Apr. 94,

Global-Climate Model, ET Aug/Sept. 94, p11. The ICR; \$130 Million of Water Quality Monitoring, Albert Ilges and Fredrick W. Pontius, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p788-791.

Modeling Ecological Impacts of Destratification, S. Geoffrey Schladow, David P. Hamilton and Murray C. Burling, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1321-

1325

Perspectives on Water Quality Regulation, J. David Holm, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p145-154.

Third Lake Watershed Assessment and Action Plan, Carey M. Brand, Gary E. Raasch and Marion E. Kessy, (Hy-M. Brand, Gary E. Rassell and Marion E. Ressy, (a) draulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p257-261.

U.S. Drinking-Water Regulations: Treatment Technologies and Cost, Benjamin W. Lykins, Jr. and Robert M. Clark,

EE July/Aug. 94, p783-802.

Water Quality Enhancement Technology for River-Reservoir Systems, John S. Gulliver and Steven C. Wilhelms, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1331-1340

Water reclamation

Chicago's Waterfalls, Rita Robison, CE July 94, p36-39.

Design Aspects of Modeling Reclaimed Water Use, Michael G. Heyl, David K. Ammerman and Jeffrey F. Payne, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel,

ed., 1994), p698-701.

Potable Water Reclamation—A Practical Option to Tradi-tional Sources, Gary Bostrom, Peter D. Binney and Glenn Hamilton, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p702-705.

Reclaiming Water With Wetlands, Christie Moon Crother,

CE July 94, p52-55.

Role of Constructed Wetlands in Water Resources Management, Christie Moon Crother, John S. Crossman and P. Ravishanker, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p669-672.

Water Reclamation Potential in Southern California to the Year 2010, Bahman Sheikh, (Water Policy and Manage-ment: Solving the Problems, Darrell G. Fontane, ed. and

Harry N. Tuvel, ed., 1994), p661-664.

Water resources

Alameda Creek Water Resources Study, Terry L. Erlewine and Edward H. Stewart, (Water Policy and Manage-ment: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p17-20.

The Application of Streamflow Duration Curves in Water Resources Engineering, Richard M. Vogel and Neil M. Fennessey, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel,

ed., 1994), p201-204. ARC/HEC2: an ARC/INFO - HEC-2 Interface, Dean Djokic, Mark A. Beavers and Chandrashekar K. Deshakulakarni, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p41-44.

Austin's Strategy for Integrated Water Resource Planning, Tony T. Gregg, Maureen McReynolds and Eric Rothstein, (Revenue Enhancement for Water and Wastewater Systems, Jerry R. Rogers, ed. and William P. Bullock, Jr., ed., 1994), p1-7.

Changing Conditions and Water Elections, Charles H. Lawrance, James M. Stubchaer and Jon A. Ahlroth, WR

July/Aug. 94, p458-475.
Colorado River Decision Support System, Larry Brazil and Ross Bethel, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p307-310.

el, ed., 1994), p307-310.

Correlating Trihalomethane Data, Paul H. Hutton and Francis I. Chung, EE Jan./Feb. 94, p219-241.

Development of a Geographical Information System for On Farm Management, Malinda Fowler, Don R. May, Omnia El-Hakim, A. Bennally, A. Johnson, S. Spaulding, Wilson Begay and Timothy K. Gates, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p132-135.

Drawing Conclusions as to Environmental Regulation, William Whipple, Jr., Harlan Agnew, Michael L. Clar, Robert Fiehweg, Tad Foster, Howard Holme, Marshall Jennings, Jonathan Jones, Joan Lee, Jan Rosholt, Charles Sain, Kyle Schilling, Earl Shaver and Don Woodward, National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p258-271.

The Effects of Spatial Resolution in Modeling the North Fork Drainage of the Gunnison River Basin, Leslie Frankoski, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel,

ed., 1994), p29-32.

Evaluating Risk of Extreme Events for Univariate-Loss Functions, James H. Lambert and Duan Li, WR May/

June 94, p382-399.

Evaluation of a 6-Wire Thermocouple Psychrometer for Determination of In-Situ Water Potentials, Carole L. Loskot, Joseph P. Rousseau and Mark A. Kurzmack, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2084-2091.

HEC River Analysis System (HEC-RAS), Vernon Bonner, Gary Brunner and Mark Jensen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p376-380.

Integrated Planning for International River Basin, Alvin S. Goodman, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p130-

Nakajima Subsurface Dam, Satoshi Nagata, Kazuki Azuma, Masato Asano, Teruyuki Nishijima, Hideaki Shiiba, David S. Yang and Reika Nakata, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p437-440.

National Water Resources Regulation: Where is the Envi-ronmental Pendulum Now? Howard Holme, ed., 1994,

0-7844-0045-8, 275pp.

A Nested-Model Approach to Investigate Climate Change, Lauren E. Hay and George H. Leavesley, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p477-480.

Opinions Run Hot and Cold at Water Conference, CE July 94, p11-12.

Optimization Analysis of Deficit Irrigation Systems, Francesco Mannocchi and Pompeo Mecarelli, IR May/June 94, p484-503.

Optimum Operation of Recharge Basins, Hasan Mushtaq, Larry W. Mays and Kevin E. Lansey, WR Nov./Dec. 94, p927-943.

Parallel SDP for Multi-Reservoir Management, Elizabeth A. Eschenbach, Christine A. Shoemaker and Hugh M. Caffey, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p818-821.

Partial Infeasibility Method for Chance-Constrained Aquifer Management, Nathan Chan, WR Jan./Feb. 94, p70-

Picturing Pollution, Kevin G. Coulton, CE Mar. 94, p62-

PSF-PM Verification of 3D Free Surface Flow Models, Sam S. Y. Wang and F. Mauricio Toro-Botero, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p895-899.

Risk-Based Decision Making in Water Resources VI, ISSN: 1063-5076, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994, 0-7844-

0032-6, 381pp.

San Diego County Water Authority's Emergency Storage Project Supplying Water During Natural Disasters, Uli Kappus, Ken Steele and Dick Westmore, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p885-888.

Solving Collections Problems to Increase Revenue: The Houston Experience, 1988-1993, Karen Philippi, (Revenue Enhancement for Water and Wastewater Systems, Jerry R. Rogers, ed. and William P. Bullock, Jr., ed., 1994), p8-14.

A Space Station of Mars, Kimberly Butler, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p787-792.

Susceptibility of Reservoirs to Drought Using Palmer Index, William K. Johnson and Roger W. Kohne, WR May/June 93, p367-387.

Update of the Implications of Recent Space Resource Discovery, Anthony Zuppero and Pat Whitman, (Engineer-ing, Construction, and Operations in Space IV, Rodney Galloway, ed. and Stanley Lokaj, ed., 1994), p532-541.

Water Policy and Management: Solving the Problems, Dar-rell G. Fontane, ed. and Harry N. Tuvel, ed., 1994, 0-7844-0020-2, 900pp.

Wichita Aquifer Gets Big Charge From Little Arkansas, CE Sept. 94, p13.

Water resources development

Water Resources Planning and Management: Now & Twenty Years from Now, Kyle E. Schilling, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p219-225.

Water resources management

Activity Based Costing in Water Resources Management, James P. Heaney and David J. Sample, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p632-636.

Alternative Designs for a Water Resources Planning and Management Electronic Information Exchange Network, Quentin W. Martin, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p690-693.

Application and Benefits of Aquifer Recharge in Santa Fe, New Mexico, Kevin Bral, Mark Fenton and Mike Slota, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p21-24.

Bromine Distribution Factors in THM Formation, Paul H. Hutton and Francis I. Chung, WR Jan./Feb. 94, p1-16.

The Case for Southern Nevada's Thirst, G. C. K. Grinnell. (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p319-322.

Clean Water is not Enough, James R. Karr, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p79-95.

Climate Change, Jim Lambert, (), p352-354.

Climate Warming and Great Lakes Management, Benjamin F. Hobbs, Philip T. Chao, Mohammed Nayal and William T. Bogart, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p295-316.

Considering Uncertainties in Water Resource Designs, Yeou-Koung Tung, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry

N. Tuvel, ed., 1994), p457-460.

Cooperative Game Theory in Water Resources, Morris Israel, Jay R. Lund and Gerald T. Orlob, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p569-572.

Cooperative Ground-Water Resources Management: Local Perspective, Amleto A. Pucci, Jr., WR Nov./Dec. 94, p984-991

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- Defining and Using Reference Evapotranspiration, George H. Hargreaves, IR Nov./Dec. 94, p1132-1139.
- Drinks Are On the House, CE Nov. 94, p8.
- Drought and Water-Supply Management: Roles and Responsibilities. Neil S. Grigg and Evan C. Vlachos, WR Sept./Oct. 93, p531-541.
- Environment-Irrigation Trade-Offs and Risks, Norman J. Dudley, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p.280-294.
- Expert Analysis in Regulated Irrigation Canal Modelling, Forrest M. Holly, Jr. and John P. Parrish, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p92-96.
- Grazing for Funding: Agency Hydrodiplomacy, C. M. Rogers and J. E. Robinson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p561-564.
- Historical, Current and Upcoming Regulation Schedules for Lake Okeechobee, Vinio Floris, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p53-56.
- Hurricane Andrew and the Central and Southern Florida Project, James W. Vearil and Christopher T. Smith, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p597-606.
- Instream Flow Policy: An Alternative to Minimum Flowby, Donald R. Jackson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p222-225.
- Instream Flow Studies: Susquehanna Basin and Pennsylvania, Donald R. Jackson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p145-148.
- Integration of Water Quantity and Quality in River Basin Network Flow Modeling, John W. Labadie, Darrell G. Fontane and Tewai Dai, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p61-64.
- Integration of Water Resource Models and GIS for Water Resource Management, Roger T. Kilgore, Joseph S. Krolak and Michael Walsh, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p37-40.
- Integration of Water Rights and Network Flow Modeling in the Upper Snake River Basin, Donald K. Frevert, John W. Labadie, Roger K. Larson and Nancy L. Parker, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p577.
- Kissimmee River Restoration Study, Hsieh Wen Shen, Guillermo Tabios, III and James A. Harder, WR May/ June 94, p330-349.
- Managing Reservoir Storage for Fish Production, Terry Waddle and Jeff Sandelin, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p49-52.
- Managing the Russian River Aggregate Resources, James J. Jordan, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p838-841.
- Minimum-Impact Modeling of Nonpoint-Source Groundwater Pollution, K. Hatfield, N. Samani and R. Noss, IR Jan./Feb. 94, p149-167.
- Nonlinearity and Free-Surface Flow, Nazeer Ahmed, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p327-331.
- Opinions Run Hot and Cold at Water Conference, CE July 94, p11-12.
- Poorer Is Riskier: Opportunity for Change, Richard C. Schwing, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p102-121.

- Potable Water Reclamation—A Practical Option to Traditional Sources, Gary Bostrom, Peter D. Binney and Glenn Hamilton, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed. 1994), p702-705.
- Tuvel, ed., 1994), p702-705.

 Problems Faced by Faculty in Minority Institutions, Emmanuel U. Nzewi, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), P89-92.
- Public Involvement in Water Resources Management, James W. Vearil, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p445-448.
- Reallocation Impacts of Eastern Water-Law Changes, William E. Cox, WR July/Aug. 94, p476-484.
- Reclaiming Water With Wetlands, Christie Moon Crother, CE July 94, p52-55.
- Reliability Analysis of Water Distribution Systems, Rafael G. Quimpo, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p45-55.
- and Eugene L. Nakmiv, etc., 1974), pp. 3-32.

 Reoperation of Existing Reservoirs to Serve Changing Needs: Observations on Institutional Inertia, Conflict, and Efficiency, Douglas P. Gillingham, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p565-568.
- Restoration of Lakes and Canals in an Urban Park Belle Isle, Michigan, Catherine Riseng, Douglas Denison and Bernard Fekete, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p.261-270.
- Risk Analysis: Wet Weather Flows in S.E. Michigan, Jonathan W. Bulkley, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p89-101.
- Risk Management Strategies for Natural, Manmade, and Technological Hazards, Benjamin F. Hobbs, (), p348-349
- Role of Constructed Wetlands in Water Resources Management, Christie Moon Crother, John S. Crossman and P. Ravishanker, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p669-672.
- The Scottsdale Water Campus: There's Nothing Like It, Wallace A. Ambrose, Brad Hemken, Gary G. Small and Leonard Dueker, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p665-668.
- Statistical Techniques for Assessing Water-Quality Effects of BMPs, John F. Walker, IR Mar./Apr. 94, p334-347.
- Thoughts of Reservoir Management Studies, Morris Israel, Kenneth W. Kirby and Jay R. Lund, Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p238-241.
- Understanding the Uses of History in Water Resources Planning and Management, Loretta C. Lohman, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p505-508.
- Using A Risk-Based Relative Position Analysis to Initiate Water Conservation Measures, Chris Basford and Ron Harris, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p810-813.
- Using Geographical Information Systems to Manage a Multipurpose Water Project, Stan B. Mattingly, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p33-36.
- Water 2050-Supply for the Portland, Oregon Metropolitan Region Using the Integrated Resource Planning Process, Lorna Stickel, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p230-233.
- Water Engineers Challenged to Take Lead on Sustainable-Development Track, CE Aug. 94, p64.
- Water Infrastructure Risk Ranking and Filtering Method, Tomas Dolezal, Yacov Y. Haimes and Duan Li, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p56-72.

Water Policy and Management: Solving the Problems in Southern New Jersey, Frank S. Impagliazzo, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p497-500.

Water Policy Change, Implications for Pyramid Lake, John W. Fordham, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuv-

el, ed., 1994), p501-504.

Water Resource Modeling and Consensus Building, Steven M. Thurin and Rick J. Cox, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and

Harry N. Tuvel, ed., 1994), p473-476.

Water Resources Development in the 1990's: A New Process, Peter D. Binney, Lawrence H. Roth and Daniel D. Heagerty, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p822-825.

Water Resources Education and Research at a Model HBCU Water Resources Center, Victor I. Okereke, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

p85-88.

Water Resources Planning and Management: Now & Twenty Years from Now, Kyle E. Schilling, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p219-

Waterfronts: GATEWAY to Your Community, Allyson Forsythe-Fiene, Robert D. Espeseth and Joseph T. O'Leary, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p449-459.

World Bank Charts a New Course for Water-Resources Management, CE Jan. 94, p24-25.

World Bank Update: In Deep Water, Francois M.I. Lampietti, WP Special issue 94, p26-30.

Agroforestry Drainage Management Model. III: Field Salt Flow, F. F. Karajeh and K. K. Tanji, IR Mar./Apr. 94, p397-413

Austin's Strategy for Integrated Water Resource Planning, Tony T. Gregg, Maureen McReynolds and Eric Rothstein, (Revenue Enhancement for Water and Wastewater Systems, Jerry R. Rogers, ed. and William P. Bullock, Jr., ed., 1994), p1-7.

The Cost of Water Reuse is a Benefit to All, Richard W. Harris and Jacqueline A. Millet, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed.

and Harry N. Tuvel, ed., 1994), p706-709.

Denver's Direct Potable Water Reuse Demonstration Project, William C. Lauer, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p657-660. Effect of Saline Irrigation Water on Tree Growth, Ghulam

Hussain and Otto J. Helweg, IR Sept./Oct. 94, p970-978. Reclaiming Water With Wetlands, Christie Moon Crother, CE July 94, p52-55.

Reusable Water Exhange Modeling, John R. Clark and John N. Winchester, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry

N. Tuvel, ed., 1994), p738-741.

Role of Constructed Wetlands in Water Resources Management, Christie Moon Crother, John S. Crossman and P. Ravishanker, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p669-672. Setting Competitive Water Reuse Rates, David D. Green

and Stephen H. Riley, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry

N. Tuvel, ed., 1994), p802-805.

Water Reclamation Potential in Southern California to the Year 2010, Bahman Sheikh, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p661-664.

Water rights

Administering a Regulated Riparian System of Water Rights, Joseph W. Dellapenna, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p881-884.

Austin's Strategy for Integrated Water Resource Planning, Tony T. Gregg, Maureen McReynolds and Eric Roth-stein, (Revenue Enhancement for Water and Wastewater Systems, Jerry R. Rogers, ed. and William P. Bullock, Jr., ed., 1994), p1-7.

Changes of Water Rights - The Colorado Experience, Joe Tom Wood, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuv-

el, ed., 1994), p372-375.

Colorado River Decision Support System, Larry Brazil and Ross Bethel, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuv-

el, ed., 1994), p307-310.

Convergence and Divergence Between Regulated Riparian and Prior Appropriation Provisions in the ASCE Model State Water Rights Code, Ray Jay Davis, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p465-468.

A Decision Support System for Administering Water Rights in an Alluvial Aquifer, John C. Tracy, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p287-

Decision Support System for Conjunctive Use Under Complex Water Right Conditions, Jeffrey W. Fredericks, John W. Labadie and Jon Altenhofen, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p582-587

Determinants and Trends in Water Right Market Prices, Ari M. Michelsen, Patrick Person and Robert A. Young, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

p165-168.

Evaluation of the Pagosa Springs Geothermal Reservoir and Implications of Potential Additional Reservoir Development, Jon Ford and Dennis McGrane, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p376-379.

Exploring Management Alternatives with Interactive Simulation, David I. Leib and Thomas C. Stiles, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p210-213.

Groundwater Modelling As a Management Tool, Courtney C. Hemenway, Al Eddebbarh and Paul Grundemann, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p596-599.

Historical and Enhanced Edwards Aquifer Recharge, Samuel K. Vaugh, Kelly J. Kaatz and Kenneth L. Choffel, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel,

ed., 1994), p380-383.

Improving Reservoir System Operations Under Water Rights Requirements, L. E. Brazil, W. Liu, G. N. Day, D. P. Laurine and R. Steger, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and

Harry N. Tuvel, ed., 1994), p588-591.

Integration of Water Rights and Network Flow Modeling in the Upper Snake River Basin, Donald K. Frevert, John W. Labadie, Roger K. Larson and Nancy L. Parker, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

Integration of Water Rights and Salinity Considerations in Comprehensive River Basin Management, Ralph A. Wurbs, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel,

ed., 1994), p396-399

PROSIM - A Water Rights-Based Operational Simulation Model of the Provo River, Steven M. Thurin, Paul C. Summers and P. Kirt Carpenter, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p578-581.

Reallocation Impacts of Eastern Water-Law Changes, William E. Cox, WR July/Aug. 94, p476-484.

Water Resource Modeling and Consensus Building, Steven M. Thurin and Rick J. Cox, (Water Policy and Manage-ment: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p473-476.

Water Transfer Law in Kansas, John C. Peck, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p279-282.

Groundwater Management and Systems Operations Optimization Utilizing Supply, Well Reliability, and Demand Distribution as Decision-Making Criteria, Kathlie Supply Jeng and Jerry Rogers, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Twod ed. 1004). 37780. N. Tuvel, ed., 1994), p77-80.

The Implementation of a Comprehensive Water and Wastewater Utility Development Fee Process to Allocate the Cost of New Development to the Beneficiaries, Kenneth M. Needham and Joyce Kinnear, (Revenue Enhancement for Water and Wastewater Systems, Jerry R. Rogers, ed. and William P. Bullock, Jr., ed., 1994), p24-30.

An Integrated Approach to the Real-Time Control of Water Supply and Distribution Systems, Chun-hou Orr and Bryan Coulbeck, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p850-854.

Setting Competitive Water Reuse Rates, David D. Green and Stephen H. Riley, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry

N. Tuvel, ed., 1994), p802-805.

Solving Collections Problems to Increase Revenue: The Houston Experience, 1988-1993, Karen Philippi, (Revenue Enhancement for Water and Wastewater Systems, Jerry R. Rogers, ed. and William P. Bullock, Jr., ed., 1994), p8-14.

Willingness and Ability to Pay for Rural Water, Jonathan Platt and Steven Piper, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry

N. Tuvel, ed., 1994), p157-160.

Willingness-to-Pay for Alternative Shortage Probability Distributions, Jay R. Lund, (Water Policy and Manage ment: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p521-524.

Water shortage

Ranking Ground-water Management Alternatives by Multicriterion Analysis, Lucien Duckstein, Wiktor Treichel and Samir El Magnouni, WR July/Aug. 94, p546-565.

California Water District Eyes Seismic Retrofits, CE Nov. 94, p19.

Water storage

Aquifer Storage and Recovery at the Centennial Water and Sanitation District, Andrea Aikin, Courtney Hemenway and Paul Grundemann, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p592-595.

Design Considerations for Night Storage in Irrigation Systems, Wadie F. Mankarious, (Water Policy and Manage-ment: Solving the Problems, Darrell G. Fontane, ed. and

Harry N. Tuvel, ed., 1994), p331-334.

Development of an Intergovernmental Agreement For a Major Multi-Party Recharge Project in Central Arizona, Richard S. Siegel, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p533-536.

Maximum Surface Storage Provided by Crop Residue, John E. Gilley and Eugene R. Kottwitz, IR Mar./Apr. 94,

p440-449.

The Scottsdale Water Campus: There's Nothing Like It, Wallace A. Ambrose, Brad Hemken, Gary G. Small and Leonard Dueker, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p665-668.

Water supply

Alfalfa Irrigation During Drought, J. C. Guitjens, IR Nov./ Dec. 93, p1092-1098

Application of the PCRSS Reservoir Simulation Model to the Salt River Project, Jon S. Behrens and Yvonne Reinink, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p295-298.

Atmospheric Circulation and Snowpack in the Gunnison River Basin, Gregory J. McCabe, Jr., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p481-484.

An Attempt of an Aquifer Model with Lack of Data, Octavio Cabezut-Boo, Ricardo Anza and Luis Tubilla, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p312-316.

A Better Description of Trap Efficiency for Fine Sediment in Horizontal Settling Basins, Shaohua Marko Hsu and Wei-Sheng Yu, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1186-1192

Brackish Groundwater and Urban Runoff: Source of Sup-ply or Source of Problems? William R. Everest and Richard A. Reynolds, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p770-773.

California Water District Eyes Seismic Retrofits, CE Nov.

94, p19.

Changes of Water Rights - The Colorado Experience, Joe Tom Wood, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p372-375.

Chemical Inactivation of Cryptosporidium Parvum in Drinking Water, Gordon R. Finch and E. Kathleen Black, (Critical Issues in Water and Wastewater Treatment, Joseph N. Rvan, ed. and Mare Edwards, ed., 1994), p42-49.

Climate Change Impacts on Boston's Water Supply, Paul H. Kirshen and Neil M. Fennessey, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p489-492

Computer Simulation Model of the Integrated Local Water Supply Plan for the City of Wichita, Kansas, Jerry Blain, Gene Foster, Jeff Klein and Frank Shorney, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p734-737.

Contribution of Waterborne Radon to Home Air Quality, Arun K. Deb, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed.,

1994), p662-669.

Control of Microbial Water Quality in the Little Rock, Ar-kansas Distribution System, Bruno Kirsch, Jr., Craig Noble, Christopher H. Yu, Blaise J. Brazos and John T. O'Connor, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p58-65.

Correlating Trihalomethane Data, Paul H. Hutton and Francis I. Chung, EE Jan./Feb. 94, p219-241.

Cryptosporidium and the Milwaukee Incident, Kim R. Fox and Darren A. Lytle, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p50-57

Destruction of Gas Phase TCE Using a Plasma Reactor, Ho-Sik Yoo, John N. Veenstra, Ven-Yen Tsai and Arland H. Johannes, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p585-592.

Determinants and Trends in Water Right Market Prices, Ari M. Michelsen, Patrick Person and Robert A. Young, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p165-168.

Developing Economic Performance Information for Water water Management Projects in North China, Ari M. Michelsen and Jona Bargur, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p641-644.

Drought and Water-Supply Management: Roles and Responsibilities. Neil S. Grigg and Evan C. Vlachos, WR Sept./Oct. 93, p531-541.

Earthquake Didn't Devastate Water System, CE May 94,

Effect of Alkalinity on Copper Corrosion, Travis E. Meyer and Marc Edwards, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Ed-

wards, ed., 1994), p9-16.

The Effects of NOM and Coagulation on Copper Corrosion, John P. Rehring and Marc Edwards, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Marc Edwards, ed., 1994), p26-33.

Evaluation and Management of Non-Point Source Pollu-tants in the Lake Tahoe Watershed, G. Fred Lee and Anne Jones-Lee, (Critical Issues in Water and Waste-

water Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p516-523.
Evaluation of the Water Supply Potential of the Floridian Aquifer in Seminole County, Florida, Lee P. Wiseman, Robert P. Schreiber, Ricardo Diaz and Charles J. Voss. (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

Evolution of an Endangered Species Study-The Ouachita Madtom, Gregory M. Quartucci and Fred C. Pinkney, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

Fort Bend County Surface Water Supply Study, Martha F. Juch and David E. Winslow, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed.

and Harry N. Tuvel, ed., 1994), p214-217.

Groundwater Modelling As a Management Tool, Courtney C. Hemenway, Al Eddebbarh and Paul Grundemann, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p596-599.

Historical and Enhanced Edwards Aquifer Recharge, Samuel K. Vaugh, Kelly J. Kaatz and Kenneth L. Choffel, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel,

ed., 1994), p380-383. Instream Flow Policy: An Alternative to Minimum Flowby, Donald R. Jackson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry

N. Tuvel, ed., 1994), p222-225.

An Integrated Approach to the Real-Time Control of Water Supply and Distribution Systems, Chun-hou Orr and Bryan Coulbeck, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N.

Tuvel, ed., 1994), p850-854.

Involving the Public to Reach Consensus in Water Resources Projects - An Interdisciplinary Perspective, Lee Judd, Ken Steele, Sara Katz and Scott McCreary, (Water Policy and Management: Solving the Problems, Darrell Fontane, ed. and Harry N. Tuvel, ed., 1994), p513-

Method for Estimating Efficiency in Spanish Irrigation Systems, Wolfgang Krinner, Angel García and Federico Estrada, IR Sept./Oct. 94, p979-986.

Missouri River Economic Impacts Model, Charles Hillerson and Ronald Roberts, (Water Policy and Manage-ment: Solving the Problems, Darrell G. Fontane, ed. and

Harry N. Tuvel, ed., 1994), p637-640. Modeling Issues of Copper Solubility in Drinking Water, Michael R. Schock, Darren A. Lytle and Jonathan A. Clement, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p17-25.

Nation-Wide Bromide Occurrence and Bromate Formation Potential in Drinking Water Supplies, P. Westerhoff, M. Siddiqui, J. Debroux, W. Zhai, K. Ozekin and G. Amy, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p670-

Optimal Operation of Multiple-Reservoir System, Philip D. Crawley and Graeme C. Dandy, WR Jan./Feb. 93, p1-17. Policy on Private Water Sales in Rural Ghana, Fred O.

Boadu, WR Nov./Dec. 94, p944-961. Recreating a Process: The West Georgia Regional Water Supply Plan, Ken Hall, David Vaughn and Jim Cooley, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

The Regulation of Lake Ontario During the Spring of 1993; a Period of Record Supplies, Anthony J. Eberhardt and Peter P. Yee, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p187-191.

The Relationship of Speciation to Iron and Manganese Removal Strategies, Kenneth Carlson, William Knocke and Kevin Gertig, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p66-73.

Reusable Water Exhange Modeling, John R. Clark and John N. Winchester, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry

N. Tuvel, ed., 1994), p738-741.

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Risk Management in Wellhead Protection, David A. Chin and Prasad V. K. Chittaluru, WR May/June 94, p294-

Risk Management Strategies for Natural, Manmade, and Technological Hazards, Benjamin F. Hobbs, (), p348-

Salt River Project Strategic Water Resource Plan, Harold W. Thomas and Mark A. Emelity, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p234-237.

San Diego County Water Authority's Emergency Storage Project Supplying Water During Natural Disasters, Uli Kappus, Ken Steele and Dick Westmore, (Water Policy Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p885-888.

Seismic Analysis of Failure and Loss of Function of Water Pumping Facilities, M. A. Cassaro, S. E. Hamburg, D. An and M. J. Cassaro, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1208-1213.

The Small Reclamation Projects Loan Program A Development Tool For The 90's, Loretta C. Lohman, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p119-122

Thoughts of Reservoir Management Studies, Morris Israel, Kenneth W. Kirby and Jay R. Lund, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p238-241.

A Three-Dimensional Numerical Simulation of Seasonal Flow and Salt Transport in the C&D Canal, Bernard B. Hsieh, David R. Richards and Jeff Gebert, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p595-599.

Transbasin Diversions: Trends in State Legislation, George William Sherk, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuv-

el, ed., 1994), p537-540.

Unsteady Spillway Inlet Conditions at the Weatherford Water Supply Reservoir, Steven L. Barfuss, J. Paul Tullis and Stuart R. Wilson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p558-562.

Water 2050-Supply for the Portland, Oregon Metropolitan Region Using the Integrated Resource Planning Process, Lorna Stickel, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p230-233.

Water Chemistry of Lead Corrosion Control, Leland L. Harms, Jonathan A. Clement and Michael R. Schock, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p34-

Water Policy and Management: Solving the Problems in Southern New Jersey, Frank S. Impagliazzo, (Water Pol-icy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p497-500.

Water-Supply Operations during Drought: Continuous Hedging Rule, Jhih-Shyang Shih and Charles ReVelle, WR Sept./Oct. 94, p613-629.

WATSUP: A Simulation Model for Water Supply Cost and Reliability, Mark R. Jensen and Jay R. Lund, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p806-

Willingness-to-Pay for Alternative Shortage Probability Distributions, Jay R. Lund, (Water Policy and Manage-ment: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p521-524.

Water supply forecasting
Decision-Support System for Long-Range Stream Flow
Forecasting, Michael Bender and Slobodan P. Simono-

vic, CP Jan. 94, p20-34.

Demand-Driven Operation of Reservoirs Using Uncertainty-Based Optimal Operating Policies, Haralambos V. Vasiliadis and Mohammad Karamouz, WR Jan./Feb. 94,

Time-Series Modeling for Long-Range Stream-Flow Fore-casting, Michael Bender and Slobodan Simonovic, WR Nov./Dec. 94, p857-870.

Water supply systems

Argentina outlook, WP Spring 94, p4.

Boston's Backup Water Supply, Lawrence J. Bergen, CE

Mar. 94, p66-68.

Controlling Lead and Copper Corrosion and Sequestering of Iron and Manganese, Jonathan A. Clement, Michael Schock and Darren Lytle, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p1-8.

Design of Branched-Water-Supply Network on Uneven

Terrain, Brian Young, EE July/Aug. 94, p974-980.
Designing Optimal Reliable Multiquality Water Supply Systems, Avi Ostfeld and Uri Shamir, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p270-274.

The Everett, Washington, Water Supply IRP, Dan Mathias, Lloyd Skinner and Lisa Tobin, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed.

and Harry N. Tuvel, ed., 1994), p404-407.

Experimental Study on Unsteady Flow in Open Channels with Flood Plains, A. Tominaga, M. Nagao and I. Nezu, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p396-405.

Graphical Network Model Simplifies Water Analysis, Michael D. Larkin, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p296-

317

Hydraulic Analysis of an HDPE Water Supply Pipeline, Yifan Zheng and Adnan M. Alsaffar, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H.

Pipetines, Deon 1. Fowles, ed. and Douglas H. Wegener, ed., 1994), p318-328. Hydraulic Analysis of the Water Distribution System, Vail Valley Consolidated Water District, Vail, Colorado, Mark Rosser and Kevin W. McBrien, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p452-472.

Jointless Pipeline Spans Pensacola Bay, CE Sept. 94, p96. Lewis and Clark Rural Water System: A Regional Approach to Solving Domestic Water Supply Problems for a Tri-State Area, Pamela A, Bonrud, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p161-164.

Measuring and Modeling Chlorine Propagation in Water Distribution Systems, Robert M. Clark, Walter M. Grayman, James A. Goodrich, Rolf A. Deininger and Ken-

neth Skov, WR Nov./Dec. 94, p871-887.

Modeling Chlorine Residuals in Drinking-Water Distribution Systems, Lewis A. Rossman, Robert M. Clark and Walter M. Grayman, EE July/Aug. 94, p803-820.

Optimal Control of Water-Supply Pumping Systems, Lin-dell E. Ormsbee and Kevin E. Lansey, WR Mar./Apr. 94, p237-252.

Optimal Pump Operations Considering Pump Switches, Kevin E. Lansey and Kofi Awumah, WR Jan./Feb. 94, Parameter Estimation in Water-Distribution Systems by

Least Squares, R. S. N. Datta and K. Sridharan, WR July/Aug. 94, p405-422. Performance of Integrated Municipal Water System During Drought, Radwan A. Al-Mubarak Al-Weshah and Doug-

las T. Shaw, WR July/Aug. 94, p531-545. Progression of Computer Applications in Water Supply and Distribution Systems, Chun-Hou Orr, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p622-

629. Reliability Analysis of Water-Distribution Systems, Rajesh Gupta and Pramod R. Bhave, EE Mar./Apr. 94, p447Revenue Enhancement for Water and Wastewater Systems, Jerry R. Rogers, ed. and William P. Bullock, Jr., ed., 1994, 0-7844-0030-X, 35pp.

Selecting Controls for Water Distribution Systems, J. Paul Tullis, (Hydraulics of Pipelines, Deon T. Fowles, ed. and

Douglas H. Wegener, ed., 1994), p43-61.

Simulating Water Supply Systems of the Raritan Basin, Michael Bennett, Marshall R. Taylor, Che-Hsun Wan and Daniel P. Loucks, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p433-436.

Soil Water Model for Evaluating Water Delivery Flexibili-ty, Sophie Lamacq and Wesley W. Wallender, IR July/

Aug. 94, p756-774.

USAid to Alleviate Aral Sea Depletion, CE Feb. 94, p18-19.

Step Pool Geometry and Flow Characteristics in Low-Sediment-Storage Channel Beds, Tamir Grodek, Moshe Inbar and Asher P. Schick, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p819-823.

Strengths and Weaknesses of Shallow Water Equations in Steep Open Channel Flow, R. C. Berger, (Hydraulic En-gineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1257-1262.

Water surface profiles

Determination of Sediment Profile for a Dry Flood Control Basin, Rebecca J. Stonestreet and Scott E. Stonestreet, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1004-1008.

GLFSVIEW - GLFS Product Viewing Application, Yi-Fei P. Chu, Chieh-Cheng J. Yen and Keith W. Bedford, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p207-211.

Hydrodynamic Modeling of San Diego Bay, Parmeshwar L. Shrestha, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p140-144.

Potential-Flow Solution to 2D Transition from Mild to Steep Slope, J. S. Montes, HY May 94, p601-621.

Study of Friction Factors in the Upper Reaches of the Rio Grande, Cassie C. Klumpp and Drew C. Baird, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p702-706.

Using Drop Structures for Stream Gaging, Bobby J. Brown, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh,

ed., 1994), p21-26.

Water table

1993 Ground-Water Flooding in the Havana Area, Adrian P. Visocky, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p608-

Agroforestry Drainage Management Model. III: Field Salt Flow, F. F. Karajeh and K. K. Tanji, IR Mar./Apr. 94, p397-413.

Drain-Spacing Calculation Considering Influence of Evaporation, Wang Wenyan, Shen Bing and Li Zhilu, IR May/June 94, p563-572.

Evapotranspiration by Young Florida Flatwoods Citrus Trees, Brian J. Boman, IR Jan./Feb. 94, p80-88.

Gravity and Megnetic Investigations of Yucca Wash, Southwest Nevada, V. E. Langenheim and D. A. Ponce, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2272-2278.

Quantification of the Mechanisms Controlling the Removal Rate of Volatile Contaminants by Air Sparging, Gretchen L. Hein, Neil J. Hutzler and John S. Gierke, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p556-563.

Spring Deposits and Late Pleistocene Ground-Water Levels in Southern Nevada, Jay Quade, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p2530-2537.

Unsteady Drainage with Variable Drainage Porosity, Ra-iendra K. Gupta, Ashim K. Bhattacharya and Pitam

Chandra, IR July/Aug. 94, p703-715.

Water tanks

Lateral-Load Analysis of Frame Stagings for Elevated Water Tanks, Sajjad U. Sameer and Sudhir K. Jain, ST

May 94, p1375-1394.

Performance of a Steel Tank Founded on a Marine Clay, H. Senapathy, J. R. Davie and L. W. Young, Jr., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p830-841.

Settlement Predictions Using Piezocone, J. R. Davie, H. Senapathy and W. Murphy, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p818-829.

Water temperature
Effects of Climate Change on Water Quality, G. K. Meyer and G. T. Orlob, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N.

Tuvel, ed., 1994), p275-278.

Flocculation Kinetics Using Fe(III) Coagulant to Coagulate Kaolin Clay in Water: Effects of Temperature, Lim-Seok Kang and John L. Cleasby, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p162-169. Hydraulic Analysis of an HDPE Water Supply Pipeline,

Yifan Zheng and Adnan M. Alsaffar, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H.

Wegener, ed., 1994), p318-328.

Water transfer

Determinants and Trends in Water Right Market Prices, Ari M. Michelsen, Patrick Person and Robert A. Young, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p165-168.

Integration of Water Quantity and Quality in River Basin Network Flow Modeling, John W. Labadie, Darrell G. Fontane and Tewai Dai, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p61-64.

Water Transfer Law in Kansas, John C. Peck, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p279-282.

Water transportation

Overcrossing a Freeway with Water Pipelines in Dedicated Structures, Richard J. Pardini, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p387-394.

Water treatment

Activated Carbon as a Catalyst for Polymerization of Phenolic Compounds, Jacob A. Bourdeau and Radisav D. Vidic, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p756-763.

Adsorption of 1,1,2-Trichloroethane from River Water, Roberto M. Narbaitz and Andrew Benedek, EE Nov./

Dec. 94, p1400-1415.

Anaerobic Biodegradation of Chloroform under Methanogenic Conditions, Devesh, Munish Gupta, Makram T. Suidan and Gregory D. Sayles, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p609-616.

Application and Benefits of Aquifer Recharge in Santa Fe, New Mexico, Kevin Bral, Mark Fenton and Mike Slota, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

Arsenic Removal Via Softening, Laurie McNeill and Marc Edwards, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed.,

1994), p640-645.

Assessing Roughing Filtration Design Variables, Jennifer O. Cole, Catherine Westersund and M. Robin Collins, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p170-

Assessing the Reliability of Low Pressure Membrane Sys-tems for Microbial Removal, Samer S. Adham and Joseph G. Jacangelo, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p313-319. Biofilm Sorption of Natural Organic Material, Gary Carlson and JoAnn Silverstein, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p460-466.

Biological Colonization of Granular Activated Carbon Fil-ters in Drinking-Water Treatment, Pierre Servais, Gilles Billen and Pascale Bouillot, EE July/Aug. 94, p888-899.

Chemical Inactivation of Cryptosporidium Parvum in Drinking Water, Gordon R. Finch and E. Kathleen Black, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p42-49.

Comparison of Biological and Chemical/Physical Iron Removal, Charlotte D. Smith and James F. Smith, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p74-81.

Computer simulation of pulsed pumping for remediation under mass transfer limited conditions, Z. Jiang and W. P. Ball, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p352-359.

Control of Microbial Water Quality in the Little Rock, Ar-Asansas Distribution System, Bruno Kirsch, Jr., Craig Noble, Christopher H. Yu, Blaise J. Brazos and John T. O'Connor, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p58-65.

Critical Issues in Water and Wastewater Treatment, Joseph Ryan, ed. and Mare Edwards, ed., 1994, 0-7844-

0031-8, 825pp.

Cryptosporidium and the Milwaukee Incident, Kim R. Fox and Darren A. Lytle, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p50-57.

DBP and Hardness Control by Membrane Filtration, Charles D. Turner and Srinivasa R. Kadubandi, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p344-351.

DBP Control in Drinking Water: Cost and Performance, Robert M. Clark, Jeffrey Q. Adams and Benjamin W. Lykins, Jr., EE July/Aug. 94, p759-782.

Design of Dredge Containment and Dewatering Facilities, John M. Logigian, Edward A. Dudek, Jr. and Michael R. Palermo, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1230-1239

Destruction of Gas Phase TCE Using a Plasma Reactor, Ho-Sik Yoo, John N. Veenstra, Ven-Yen Tsai and Arrio-sik 100, John N. Veenstra, Ven-Ten 1sal and Arland H. Johannes, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p585-592.

DOE Lab Develops System to Sack Sodium Nitrate, ET Apr./May 94, p10.

Weather Stormwater Management - Yakima, WA, John R. Genskow, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p123-126.

Dynamics of Coagulation of Clay Particles with Aluminum Sulfate, Hsiao-Wei Ching, Menachem Elimelech and Janet G. Hering, EE Jan./Feb. 94, p169-189.

Effect of Roughness and Thickness of Biofilms on External Mass Transfer Resistance, Tian C. Zhang, Paul L. Bish-op and James T. Gibbs, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p593-600.

Evaluation of Enhanced Coagulation for DBP Control, Richard J. Miltner, Sheila A. Nolan, Marcus J. Dryfuse and R. Scott Summers, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p484-491.

Evaluation of Fe oxide-coated GAC for removal and recovery of Cu(II) from water, T. C. Wang, K. P. Chandra and P. R. Anderson, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p225-232.

An Evaluation of the Impact of Recent Flooding on the Operation of a Groundwater Extraction and Treatment System at a Superfund Site, Kerry L. Gavett, Michael J. Fiore and Eric J. Meyer, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p764-771. Feasibility of Treating Synthetic Greywater by Culturing Waldmann's Dark Green Lettuce in a Hydroponic Sys tem, Ricardo B. Jacquez and Michael Montoya, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994). p1256-1265.

Filtration and Backwashing Performance of Biologically-Active Filters, A. Amirtharajah, Rasheed Ahmad, A. Al-Shawwa and P. M. Huck, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p178-185.

Flocculation Kinetics Using Fe(III) Coagulant to Coagulate Kaolin Clay in Water: Effects of Temperature, Lim-Seok Kang and John L. Cleasby, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare

Edwards, ed., 1994), p162-169.

Fouling of Nanofiltration Membranes by Natural Organic Matter, Francis A. DiGiano, Anne Braghetta, James Nilson and Bruce Utne, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p320-328. A Gap in the Surface Water Treatment Rule: The Water-

Sap in the Surface Water Treatment Rule: The water sheds, Daniel A. Okun, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p501-507.

The ICR; \$130 Million of Water Quality Monitoring, Albert Ilges and Fredrick W. Pontius, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p788-791.

Immiscible Organic Liquid Recovery Using Unconfined Membranes, Leonard Jewell and Michael J. Semmens, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p90-

Investigations of Potential Radical Interaction in the Formation of Brominated Organic Compounds in Water, Rengao Song, Adam Eyring and Roger Minear, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p467-475.

Kinetics of Ozone Disinfection in Completely Mixed System, Hongde Zhou and Daniel W. Smith, EE July/Aug.

94, p841-858

Measuring and Modeling Chlorine Propagation in Water Distribution Systems, Robert M. Clark, Walter M. Gray-

man, James A. Goodrich, Rolf A. Deininger and Ken-neth Skov, WR Nov./Dec. 94, p871-887. Modeling of Biofiltration of Natural Organic Matter in Drinking Water Treatment, Jack Z. Wang and R. Scott Summers, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p452-459. Nation-Wide Bromide Occurrence and Bromate Formation

Potential in Drinking Water Supplies, P. Westerhoff, M. Siddiqui, J. Debroux, W. Zhai, K. Ozekin and G. Amy, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p670-

Ozonation as an Alternative to Mandatory Filtration, Dimitrios Katehis, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed.,

1994), p384-391.

Performance Evaluation of Ceramic Filter Candles, Malay Chaudhuri, Sanjeev R. Verma and Anirban Gupta, EE Nov./Dec. 94, p1646-1651

NOV./Dec. 94, p1040-1031.

Permeability Behavior of a Water Treatment Sludge, M. C.
Wang and W. Tseng, GT Oct. 93, p1672-1677.

Photocatalytic Transformations and Degradation of
2.4,6-trinitrotoluene (TNT) in TiO2 Slurries, Daniel C. Schmelling and Kimberly A. Gray, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p751-755.

Pilot Test on Groundwater Organics Removal by Low-Pressure Membranes, Paul Fu, Hector Ruiz, Ken Thompson and Carl Spangenberg, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare

Edwards, ed., 1994), p336-343.

The Relationship of Speciation to Iron and Manganese Re-moval Strategies, Kenneth Carlson, William Knocke and Kevin Gertig, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p66-73.

Removal of Arsenic by Enhanced Coagulation and Mem-brane Technology, S. David Chang, Hector Ruiz, Wil-liam D. Bellamy, Carl W. Spangenberg and Debra L. Clark, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p632-639.

Removal of Bromate After Ozonation by Electron Beam Irradiation, M. Siddiqui, G. Amy, W. Cooper, C. Kuruz and T. Waite, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed.,

1994), p654-661.

SEPA's Super Water-Treatment Project Takes Top ASCE

Prize for 1994, NE May 94, p1.

Stormwater Regulation: The Local Perspective, Doug Harrison, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme,

ed., 1994), p177-186.

Treatment of Drinking Water Containing Bromate and Bromide Ions, Taha F. Marhaba and Steven J. Medlar, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p476-

Treatment of Oil in Water Emulsions by Ceramic-Supported Polymeric Membranes, Robert P. Castro, Yoram Cohen and Harold G. Monbouquette, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p82-89.

Trihalomethanes in Chlorinated Sacramento-San Joaquin Delta Drinking Water Simulated with the EPA WTP-THM Model, Russ T. Brown, Doug Brewer, Doug Owen and Zaid Chowdhury, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p492-500.

Use of Expert Systems in Selecting Equilibrium Isotherms of Organic Compound Adsorption on Activated Carbon, Imad A. Basheer and Shrinath Kotdawala, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p640-643.

The Use of SCADA for Real-time Calculation and Moni-toring for CT Compliance at the Ralph D. Bollman Water Treatment Plant, Peter Schoemann and Peter Martin, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2112-2123.

Vietnamese Market Opens to U. S. Firms, CE Apr. 94, p8. Water-Treatment-System Design for Turbidity Removal. I: Simulation, H. B. Dharmappa, S. Vigneswaran, J. Verink and O. Fujiwara, EE July/Aug. 94, p900-920.

and O. Fujiwara, E.E. July/Aug. 94, p900-920.
Water-Treatment-System Design for Turbidity Removal.
II: Optimization, H. B. Dharmappa, O. Fujiwara, J. Verink and S. Vigneswaran, EE July/Aug. 94, p921-942.

Water treatment plants

Aquifer Storage and Recovery at the Centennial Water and Sanitation District, Andrea Aikin, Courtney Hemenway and Paul Grundemann, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p592-595. At Maine Water-Treatment Plant, It's Ozone Only, CE

May 94, p12-13.

Beneficial Use Alternatives for Water Treatment Plant Residuals, Ann M. Copeland, Carel Vandermeyden and David A. Cornwell, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p137-145.

Compaction Grouting Stops Settlement of an Operating Water Treatment Plant, Percy M. Wimberly, III, F. Barry Newman, Kenneth B. Andromalos and Chris R. Ryan, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1176-1192

Computerized Facility Information Management Systems, Mike Tidwell and Cal Leckington, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p396-401.

Flow Past Two-Dimensional Lateral Slot, A. S. Ramamurthy, Weimin Zhu and B. L. Carballada, EE Nov./Dec. 94, p1632-1638.

Intelligent Tutoring Systems to Aid Water Treatment Plant Operators, Anthony G. Collins, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p107-114. Model of an Upgrade, Bruce Gall and Alan A. Smith, CE July 94, p60-62.

The Plants Must Go On, CE May 94, p8.

The San Gorgonio Pass Water Project, Richard B. Bell, Aladdin Shaikh and Stephen P. Stockton, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p73-76.

The Scottsdale Water Campus: There's Nothing Like It, Wallace A. Ambrose, Brad Hemken, Gary G. Small and Leonard Dueker, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p665-668.

The Squuntum Point Personnel Ferry and Metropolitan District Park, Quincy, Massachusetts, Patricia S. Loheed, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p370-376.

Water treatment, chemical

Arsenic Removal by Manganese Greensand Filters, Thon Phommavong and T. Viraraghavan, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p646-653.

Controlling Lead and Copper Corrosion and Sequestering of Iron and Manganese, Jonathan A. Clement, Michael Schock and Darren Lytle, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p1-8.

The Effects of NOM and Coagulation on Copper Corrosion, John P. Rehring and Marc Edwards, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Marc Edwards, ed., 1994), p26-33.

The Sensitized Photocatalysis of a Mixed Reactant System of 4-Chlorophenol and 4-Nitrophenol, Melissa S. Dieckmann, Kimberly A. Gray and Prashant V. Kamat, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p726-732.

Sensitized Photooxidation of Dissolved Sulfides in Water, T. F. Brewer, J. G. Curtis, E. A. Marchand, V. D. Adams and E. J. Middlebrooks, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p233-240.

Boston's Backup Water Supply, Lawrence J. Bergen, CE Mar. 94, p66-68.

Water use

Administering a Regulated Riparian System of Water Rights, Joseph W. Dellapenna, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p881-884.

Arizona Groundwater Management Alternatives, James F. Booker, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p351-354.

Cooperative Game Theory in Water Resources, Morris Israel, Jay R. Lund and Gerald T. Orlob, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p569-572.

Current Trends in Waterpark Development, Terry R. Barnhart, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994). p434-438.

Design and Technological Opportunities at Waterparks: The Hyland Hills' Water World Experience, Terry R. Barnhart, (Marinas. Parks and Recreation Develop-ments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p83-92.

Design Aspects of Modeling Reclaimed Water Use, Michael G. Heyl, David K. Ammerman and Jeffrey F. Payne, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p698-701.

Economic Impacts of Severe and Sustained Drought, Robert A. Young, James F. Booker and Ari M. Michel-sen, (Water Policy and Management: Solving the Prob-lems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p624-627.

Flow and Chloride Transport in the Tidal Hudson River, NY, Lawrence A. Weiss, Raymond W. Schaffranek and M. Peter de Vries, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1300-1305.

Opportunities, Constraints and Change in Reservoir Management, William K. Johnson, David T. Ford and Ralph A. Wurbs, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel,

robbens, John S. Scholler G. Colland, 1944, particular G. Consultant G. Reallocation Impacts of Eastern Water-Law Changes, William E. Cox, WR July/Aug. 94, p476-484.

Surface Water Withdrawal Permits Programs for Humid Regions, J. Wayland Eheart, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p529-532

Tampa Hopes to Stop City From Going Down the Drain, CE Mar. 94, p10,12.

Using A Risk-Based Relative Position Analysis to Initiate water Conservation Measures, Chris Basford and Ron Harris, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p810-813.

Water waves

750

Coastal Engineering Data Retrieval System (CEDRS), Danielle S. McAneny and Doyle L. Jones, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p330-338.

A Comparison of Wave Statistics in Uni- and Multidirectional Shoaling Seas, Andrew M. Cornett and Okey G. Nwogu, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p458-473.

Conservation Properties of the Mild Slope and Boussinesq Equations, Rodney J. Sobey, (Ocean Wave Measure-ment and Analysis, Orville T. Magoon, ed. and J. Mi-

meni ana Anarysis, Orvine 1. Magoon, et. and J. Mi-chael Hemsley, ed., 1994), p135-149. Crest-Breaking Time-Lapse Approach for Measuring Breaker Angle, P. Chandramohan, B. U. Nayak and N. M. Anand, WW May/June 94, p318-324.

Distributions of Envelope and Phase in Weakly Nonlinear Random Waves, M. Aziz Tayfun, EM May 94, p1009-

Equilibrium-Range Spectrum of Waves Propagating on Currents, Kyung Duck Suh, Yoo-Yin Kim and Dong Young Lee, WW Sept./Oct. 94, p434-450.

Evolutionary Fourier Analysis of Wave Data, Leon E. Borgman, Mihail Petrakos and Chao Li, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p708-725.

Integral Equation Model for Wave Propagation with Bottom Frictions, Philip L.-F. Liu and Yong-Sik Cho, WW

Nov./Dec. 94, p594-608.

A Method for Locating Spikes in a Measured Time Series, James P. McKinney, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p388-393

Opening Remarks by Robert L. Wiegel, Robert L. Wiegel, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p194-

Physical Modelling of Multidirectional Waves, A. M. Cornett, M. D. Miles and O. G. Nwogu, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p614-629.

Reflection and Transmission of Water Wave by Porous Breakwater, L. H. Huang and H. I. Chao, WW Sept./Oct. 92, p437-452.

Stability Analysis for Multilayered Rubble Wojciech Sulisz, WW May/June 94, p269-282.

Stability and Wave Transmission at Low-Crested Rubble-

Mound Structures, Jentsje W. van der Meer and Ivar F.
R. Daemen, WW Jan./Feb. 94, p1-19.

The Time Dependent Ray Method for Calculation of Wave Transformation on Water of Varying Depth and Current, Yung Y. Chao, (Ocean Wave Measurement and Analytics). sis, Orville T. Magoon, ed. and J. Michael Hemsley, ed.,

1994), p671-679.

1994), BOT-6192.
Water Waves Above Submerged Porous Plate, Xiping Yu and Allen T. Chwang, EM June 94, p1270-1282.
Wave Interaction with Semiporous Cylindrical Breakwater, M. K. M. Darwiche, A. N. Williams and K.-H. Wang, WW July/Aug, 94, p382-403.
Wave Motion Through Porous Structures, Xiping Yu and Allen T. Chwang, EM May 94, p989-1008.

- Wave Scattering by Submerged Porous Disk, Allen T Chwang and Jianhua Wu, EM Dec. 94, p2575-2587.
- Wave-Height Distribution in Storm Sea: Effect of Wave Breaking, Malcolm O. Green, WW May/June 94, p283-301.
- Wave-Induced Longshore Currents in Surf Zone, Donghoon Yoo, WW Nov./Dec. 94, p557-575.

Waterfront facilities

- Case Study of Navy Pier Pile Foundation Installation, Richard A. Nebel, II and Jeffrey S. Russell, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p311-320.
- Denver Park Withstands the Test of Time, CE Feb. 94, p.10.12
- Development of the Sheboygan Waterfront Sheboygan, Wisconsin, Robert Doyle, Fred A. Klancnik and Robert Petersen, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p552-561.
- Fraser Lands Riverfront Park Shoreline Edge Treatments, Stanley R. Cowdell and Harold C. Westerman, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p114-123.
- Multiple Use Pier Facilities in Parks, Jim Posda and Jon Guerry Taylor, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p414-423.
- Stabilization and Expansion of Historic Navy Pier, Patrick M. Doher and Bernard J. Fekete, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p300-310.
- The Waterfront Development Process, Jeffrey A. Bartoszek and Ronald E. Schults, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p93-103.
- Waterfront Renaissance Racine, Wisconsin, Thomas N. Wright, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p.544-54.
- Waterfronts: GATEWAY to Your Community, Allyson Forsythe-Fiene, Robert D. Espeseth and Joseph T. O'Leary, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p449-459.

Watershed management

- Evaluation and Management of Non-Point Source Pollutants in the Lake Tahoe Watershed, G. Fred Lee and Anne Jones-Lee, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p516-523.
- The Fleets of San Francisco Crippled by Phony Science, Wm. P. Boland, Jr., (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p162-169.
- From Crane Safety to Watershed Management, ASCE Board Adopts Five New Policies, NE July 94, p15.
- A Gap in the Surface Water Treatment Rule: The Watersheds, Daniel A. Okun, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p501-507.
- GIS Proves Invaluable in New York Watershed Study, Foster Nichols, CC June 94, p1,7-9.
- Statistical Techniques for Assessing Water-Quality Effects of BMPs, John F. Walker, IR Mar./Apr. 94, p334-347.
- Third Lake Watershed Assessment and Action Plan, Carey M. Brand, Gary E. Raasch and Marion E. Kessy, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p257-261.

Watersheds

- Algorithm for Precise Drainage-Basin Delineation, E. James Nelson, Norman L. Jones and A. Woodruff Miller, HY Mar. 94, p298-312.
- Application of a Geographic Information System to Evaluate Environmental Hazards, Mary J. S. Roth, Deborah L. Shaffer and Roger Ruggles, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p265-272.

- Combination of an Automated Channel Network Extracting System and a Distributed Watershed Model in Estimation Rainfall-Runoff Processes, Ray-Shyan Wu, Yi-Shao Lai and Cheng-Hsung Liu, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p356-360.
- Comparison of Infiltration Equations Using Flooding Infiltrometer Data, David B. Thompson and Margaret Medellin, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1090-1094.
- de St-Venant Channel Routing in Distributed Watershed Modeling, Fred L. Ogden, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p492-496.
- Determination of Watershed Features for Surface Runoff Models, N. K. Garg and D. J. Sen, HY Apr. 94, p427-
- Development of an Experimental Watershed for Testing Nonpoint Source Pollution from Urban Runoff, Vassilios A. Tsihrintzis, Hector R. Fuentes and Rizwan Hamid, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1237-1241.
- Effect of Data Sampling Time Resolution on Probability Distribution of Elapsed Time Between Rainfalls, James W. Ellerbroek, Ben Chie Yen and Robert Riggins, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p336-340.
- Effect of Nonstandard Rainfall Distributions on Stormwater Management Detention Basins, Robert G. Traver and Ronald A. Chadderton, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p612-615.
- The Effects of Spatial Resolution in Modeling the North Fork Drainage of the Gunnison River Basin, Leslie Frankoski, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p29-32.
- Efficacy of ARC/INFO GIS Application to Hydrologic Modeling, J. J. Warwick and S. J. Haness, WR May/June 94, p366-381.
- Frequency of the 1993 Flood in the Upper Mississippi River Basin, W. O. Thomas, Jr. and D. A. Eash, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p16-20.
- GIS Proves Invaluable in New York Watershed Study, Foster Nichols, CC June 94, p1,7-9.
- An Interagency Overview of Selected Stream Sedimentation Models, Shou-shan Fan, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1166-1170.
- Interfacing GIS and Water Quality Models for Agricultural Areas, Vassilios A. Tsihrintzis, Hector R. Fuentes and Rao K. Gadipudi, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p252-256.
- Managing the Russian River Aggregate Resources, James J. Jordan, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p838-841.
- Modeling Hydrologic and Pollutant Transport Processes for Stromwater Runoff to Surface Waters, Leslie L. Shoemaker, Mohammed Lahlou, Andrew Stoddard and James Pagenkopf, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1208-1212.
- Money-Saving Model, Carson Mettel, David McGraw and Susanne Strater, CE Jan. 94, p54-56.
- Non-Point Source Pollution Reduction, J. Thomas Franques and Rhonda L. Townsend, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1252-1256.
- Peak Runoff Prediction for Small Rural Watersheds, James C. Y. Guo, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p604-607.
- Predicting Sediment Yield in Storm-Water Runoff from Urban Areas, Thomas W. Haster and Wesley P. James, WR Sept./Oct. 94, p630-650.

Real-Time Flood Forecasting Using Adaptive Estimation, Dong Kug Jeong and Ben Chie Yen, (Hydraulic Engi-neering '94, George V. Cotroneo, ed. and Ralph R. Ru-mer, ed., 1994), p341-345.

Role of Urban Storm-Flow Volume in Local Drainage Problems, Bruce K. Ferguson and Tamas Deak, WR July/Aug. 94, p523-530.

Shallow Infiltration Processes in Arid Watersheds at Yucca Mountain, Nevada, Lorraine E. Flint, Alan L. Flint and Joseph A. Hevesi, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2315-2322.

A Study on Mathematical Model for Sediment Yield in Mountain Regions with Large Hillside Slopes, Duo Fang and Guoliang Yu, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

p752-756.

Water Balance of Blue Nile River Basin in Ethiopia, Peggy A. Johnson and P. Douglas Curtis, IR May/June 94,

Watershed Model for Estimating Suspended Sediment Hydrographs, Hafez Q. Shaheen, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1176-1180.

Federal Permits for Marina Development: Controlling the Process, Johnine J. Brown, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A.

Klancnik, ed., 1994), p144-153.

Metamodeling Approach for Approximating the Operating Characteristics of Series of GiGH Queues on Congested Waterways, Melody, D. M. Dai and Paul Schonfeld, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p490-497.

Practical Method for Calculating Contraction Scour, E. V. Richardson and J. R. Richardson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer,

ed., 1994), p6-10.

Practical Method for Scour Prediction at Bridge Piers, J. R. Richardson and E. V. Richardson, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1-5.

Shoals System Capabilities for Hydrographic Surveying, J. L. Irish, W. J. Lillycrop, L. E. Parson and M. W. Brooks, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p314-321

Wave action

Breaker Angle, P. Chandramohan, B. U. Nayak and N. M. Anand, WW May/June 94, p318-324.

Damage Mechanisms and Influence of Gradation for Steep Riprap, Karol Rohan, Mahrez Ben Belfadhel, Oscar Dascal and Guy Lefebvre, GT Mar. 94, p514-527.

New Technology for Navigation Entrance Black River Canal, Larry Osborn, Kevin MacIntosh and Dave Werren, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994). p387-397.

Permeability Measurements for the Modelling of Wave Action On and In Porous Structures, Marcel R. A. van Gent, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p671-

Stability and Wave Transmission at Low-Crested Rubble-Mound Structures, Jentsje W. van der Meer and Ivar F. R. Daemen, WW Jan./Feb. 94, p1-19.

The TMA Wave-Energy Constraint and Cohesive Shore-Profile Shapes, Charles N. Johnson, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Mi-

chael Hemsley, ed., 1994), p.236-250.

Wave Deformation in Front of Vertical Wall due to Wave Overtopping, Motohiko Umeyama, WW Sept./Oct. 94, p490-498.

Wave attenuation

Wave Attenuation at the Mobile Stable Berm, Gregory L. Williams and Cheryl Burke Pollock, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and

J. Michael Hemsley, ed., 1994), p339-351.

Wave Attenuation in Elastic Continuum with Attenuating Neighborhood, Songtao Xue, Jun Tobita and Masanori Izumi, EM Mar. 94, p419-430.

Wave climatology

Case Studies of Extreme Wave Analysis: A Comparative Analysis, Gerbrant van Vledder, Yoshimi Goda, Peter Hawkes, Etienne Mansard, Maria Jesus Martin, Martin Mathiesen, Eric Peltier and Edward Thompson, (Ocean Wave Measurement and Analysis, Orville T. Magoon,

wave measurement and Analysis, Orvine 1. Magoon, ed. and J. Michael Hemsely, ed., 1994), p978-992. Directional Wave Data - Measurements and Modeling Coast of Florida Erosion and Storm Effects Study, Thomas D. Smith and Jon M. Hubertz, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and

J. Michael Hemsley, ed., 1994), p76-89.

Empirical Guidance for Siting Berms to Promote Stability or Nourishment Benefits, Edward B. Hands and Donald T. Resio, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p220-228.

Measured Total Wave Climate of a Small Craft Harbor, Chuck Mesa, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p90-104.

New Technology in Coastal Wave Monitoring, Richard Seymour, David Castel, David McGehee, Juliana Thomseymour, David Caster, David McChene, Juliana Hollias and Milliam O'Reilly, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p105-123.

An Offshore Island Wave Sheltering Model, Andrew L. Kadib, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994),

p695-707.

Sines West Breakwater Emergency Repair, Hydraulic Studies, H. Ligteringen, J. W. van der Meer and M. Rita, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p99-123.

Wave crest

Experimental Study of Three-Dimensional Wave Breaking, K. She, C. A. Greated and W. J. Easson, WW Jan./Feb. 94, p20-36.

Nonlinearity in Wave Crest Statistics, David L. Kriebel and Thomas H. Dawson, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p61-75.

Stability and Wave Transmission at Low-Crested Rubble-Mound Structures, Jentsje W. van der Meer and Ivar F. R. Daemen, WW Jan./Feb. 94, p1-19.

The Swept Sine Wave Testing Technique in Hydrodynam-ic Applications, Nicholas Haritos, Okey Nwogu and Andrew M. Cornett, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p533-546.

Wave diffraction

ASA.WAVES: An Interactive PC-based Wave Forecasting Tool, Stephan T. Grilli, T. Opishinski, M. L. Spaulding and T. Isaji, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p890-904.

An Experimental and Analytical Study of the Shoreline Response to Non-Parallel Breakwaters in Oblique Waves, Michael E. McCormick and Richard W. Gordon, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p251-

An Offshore Island Wave Sheltering Model, Andrew L. Kadib, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p695-707.

Propagation of Linear Gravity Waves Over Slowly Vary ing Depth and Currents, Francisco J. Rivero and Agustín S.-Arcilla, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994),

p518-532. Wave Interaction with Semiporous Cylindrical Breakwater, M. K. M. Darwiche, A. N. Williams and K.-H. Wang, WW July/Aug. 94, p382-403. Wave dispersion

Anomalous Dispersion Paradox in Shallow Water Gravity Waves Shoaling Over Slopping Bottom, S. Yu. Kuznewaves shoam over shopping bottom, S. H. Kazie-tsov and N. S. Speransky, (*Ocean Wave Measurement and Analysis*, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p364-373.

Axisymmetric Time-Domain Transmitting Boundaries, Andrew John Deeks and Mark Felton Randolph, EM Jan.

94, p25-42

Experimental Study of Three-Dimensional Wave Breaking, K. She, C. A. Greated and W. J. Easson, WW Jan./Feb. 94, p20-36.

Ground-Motion and Soil-Response Analyses for Leninakan, 1988 Armenia Earthquake, M. K. Yegian, V. G. Ghahraman and G. Gazetas, GT Feb. 94, p330-348.

On Some Hydrodynamic Effects Found in Large Scale Experiments, Nikolai S. Speranski, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p785-793.

A Second-Generation Wave Model for Coastal Wave Prediction, J. A. Ewing and R. C. Hague, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p576-589.

An Energy Based Model for Coastal Bays and Lakes, Wil-liam S. Appleton, William L. Wood and Yan-Sheng Chang, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p565-577.

Energy Dissipation and Sediment Transport in Large Scale Tests, H. Rahlf and Y. Wu, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C.

Kraus, ed., 1994), p742-754.

Estimation of Wave Directional Spectra from Pitch-Roll Buoy Data, F. P. Brissette and I. K. Tsanis, WW Jan./

Feb. 94, p93-115.

Experimental Field Investigations of Small Delta Formation, Maria Mikhailova, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p175-188.

The Influence of Boundary Conditions on Beach Zonation, Ignacio Alonso and Federico Vilas, (Coastal Dynamics 94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicho-

las C. Kraus, ed., 1994), p417-431.

An Offshore Island Wave Sheltering Model, Andrew L. Kadib, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p695-707.

The Re-derivation of the NDBC Wind-Wave Algorithm, Ian M. Palao and David B. Gilhousen, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p569-575.

Spectral Boussinesq Modelling of Breaking Waves, J. A. Battjes, Y. Eldeberky and Y. Won, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Mi-

chael Hemsley, ed., 1994), p813-820.

Study on the Sand Deposited Behind the Detached Breakwaters, Wen-Juinn Chen and Ching-Ton Kuo, (*Coastal Dynamics '94*, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p938-949.

The Time Dependent Ray Method for Calculation of Wave Transformation on Water of Varying Depth and Current, Yung Y. Chao, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed.,

1994), p671-679.
The TMA Wave-Energy Constraint and Cohesive Shore-Profile Shapes, Charles N. Johnson, *Ocean Wave Meas-*

 urement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p236-250.
 Wave Attenuation at the Mobile Stable Berm, Gregory L. Williams and Cheryl Burke Pollock, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p339-351.

Conservation Properties of the Mild Slope and Boussinesq Equations, Rodney J. Sobey, (Ocean Wave Measure-ment and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p135-149.

Dynamic Compaction of Loose Granular Soils: Effect of Print Spacing, Y. K. Chow, D. M. Yong, K. Y. Yong and S. L. Lee, GT July 94, p1115-1133.

Estimating Sediment Relative Density Using an Impact Core Sampler and Wave Equation-based Pile Analysis, James M. Schmidt and Donald E. Bruggers, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1212-1219.

Setup and Relaxation in Glacial Sand, Donald L. York, Walter G. Brusey, Frank M. Clemente and Stephen K. Law, GT Sept. 94, p1498-1513.

The Significance of Hydrodynamic Forces in Coastal Embankment Design, Bang-Fuh Chen, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p880-889

Simplified Dynamic Method for Pile-Driving Control, Robert Y. Liang and Abdallah I. Husein, GT Apr. 93,

p694-713.

Some Aspects of Determination of Pile Capacity by the Wave Equation, Mark R. Svinkin and Wondem Teferra, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p946-951.

Wave Equation Parameters from Driven-Rod Test, Robert Y. Liang and Yuanjing Sheng, GT June 93, p1037-1057.

Brief History of the Port of Sines and General Presentation of West Breakwater, Manuel Dinis C. Dias and Jeno F. Toppler, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p3-24.

Considerations in 2-D Modeling of Hydraulically Steep Flow, R. C. Berger and R. L. Stockstill, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R.

Rumer, ed., 1994), p1285-1289.

Dynamic Modal Responses of Wave-Excited Offshore Structures, G. D. Hahn and J. R. Sanghvi, EM Apr. 94, p893-908.

Effects of Sea Surface Movement on Offshore Structures, G. D. Hahn, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1478-1483.

Large Scale Measurements of Near Surface Orbital Velocities in Laboratory Waves by Using a Surface Following Device, Stefan Woltering and Karl F. Daemrich, (Coast al Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p770-784.

Nonlinear Decomposition of a 2-D Wave Field, Jun Zhang, R. E. Randall, L. Chen, C. A. Spell, J. K. Longridge and M. Ye, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994),

p150-164.

Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994, 0-87262-922-8, 1055pp.

Overview of the Sines West Breakwater Reconstruction, Orville T. Magoon, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p1-2.

Scale Effect on Impulsive Wave Forces and Reduction by Submerged Breakwater, Tsutomu Sakakiyama and Masaharu Ogasawara, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C.

Kraus, ed., 1994), p628-641.

Second Order Directional Wave Kinematics in Shallow Water, Jagat N. Sharma and R. G. Dean, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p165-179.

Wave-Induced Forces on Armor Unit on Berm Breakwat-

wave-Induced Longshore Currents in Surf Zone, Donghoon Yoo, WW Nov./Dec. 94, p557-575.

Wave generation

Analysis of Prototype Long Period Waves for Los Ange-les/Long Beach Harbor Resonance Studies, William C. Seabergh, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p15-27.

The Determination of Typhoon Design Wave By Synthetic Probibility Method, Nai Kuang Liang and Hai Kuan Peng, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p1040-1047

On the Generation of Infragravity Waves by Shoaling Multidirectional Waves, Okey Nwogu, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Mi-

chael Hemsley, ed., 1994), p1-14.
Opening Remarks by Robert L. Wiegel, Robert L. Wiegel, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p194-

Physical Modelling of Multidirectional Waves, A. M. Cornett, M. D. Miles and O. G. Nwogu, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Mi-

chael Hemsley, ed., 1994), p614-629.

Second Order Irregular-Wave Generation in Flumes Computation of Transfer Functions by an Asymptotic Summation Method, Hemming A. Schäffer, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p784–797.

"Deepwater Waves and Tsunami Produced by the Impacts

of Small Asteroids", J. G. Hills, (Engineering, Construc-tion, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1365-1371.

Breakwater Armor Damage due to Wave Groups, Josep R. Medina, Robert T. Hudspeth and Claudio Fassardi, WW Mar./Apr. 94, p179-198.

Influence of Wave Groups on Stability of Berm Breakwaters, Kevin R. Hall, WW Nov./Dec. 94, p630-636.

Low-frequency Fluctuations of Suspended Sand and Wave Groups in the Surf Zone, R. D. Kos'yan, S. Yu. Kuznetsov and N. V. Pykhov, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p352-363.

Space-Time Variability of Sediment Suspension in the Nearshore Zone, A. E. Hay and A. J. Bowen, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p962-975.

Wave Grouping in Locally Generated Seas on Short Fetches, Edward F. Thompson and John Oliver, WW Mar./Apr. 94, p220-225.

Optical Waveguide Solar Energy System for Lunar Material Processing, Takashi Nakamura, Constance L. Senior, James M. Shoji and Robert D. Waldron, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1266-1277.

Wave height

Case Studies of Extreme Wave Analysis: A Comparative Analysis, Gerbrant van Vledder, Yoshimi Goda, Peter Hawkes, Etienne Mansard, Maria Jesus Martin, Martin Mathiesen, Eric Peltier and Edward Thompson, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p978-992.

Characteristics of Solitary Wave Breaking Induced by Breakwaters, Stéphan T. Grilli, Miguel A. Losada and Francisco Martin, WW Jan./Feb. 94, p74-92.

The December 1992 Storm at the New York Mud Dump Site, Scott McDowell, Brian May and Douglas Pabst, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p786-

Design of an In-Situ Directional Wave Gage for One Year Deployments, Gary L. Howell, (Ocean Wave Measure-ment and Analysis, Orville T. Magoon, ed. and J. Mi-

chael Hemsley, ed., 1994), p264-276.

Design Waves and Wave Spectra for Engineering Applica-tions, Chung-Chu Teng, Gerald L. Timpe, Ian M. Palao and David A. Brown, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hems-ley, ed., 1994), p993-1007.

The Determination of Typhoon Design Wave By Synthetic Probibility Method, Nai Kuang Liang and Hai Kuan Peng, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994),

p1040-1047.

Evaluation of Depth-Limited Wave Breaking Criteria, George M. Kaminsky and Nicholas C. Kraus, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p180-193.

Experimental Study of Monochromatic Wave-Ebb Current Interaction, Michael J. Briggs and Philip L. -F. Liu, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p474-

Experimental Study of Three-Dimensional Wave Breaking, K. She, C. A. Greated and W. J. Easson, WW Jan./Feb.

94, p20-36.
GLFSVIEW - GLFS Product Viewing Application, Yi-Fei P. Chu, Chieh-Cheng J. Yen and Keith W. Bedford, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p207-211. Intercomparison of Extremal Wave Analysis Methods

Using Numerically Simulated Data, Yoshimi Goda, Peter Hawkes, Etienne Mansard, Maria Jesus Martin, Martin Mathiesen, Eric Peltier, Edward Thompson and Gerbrant van Vledder, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p963-977.

Joint Probability of Superelevated Water Levels and Wave Heights at Duck, North Carolina, Douglas A. Gaffney and Gregory L. Williams, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael

Hemsley, ed., 1994), p905-917

A New Correction Procedure for Shipborne Wave Recorder Data, E. G. Pitt, (*Ocean Wave Measurement and Analysis*, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p726-739.

Nonlinear Decomposition of a 2-D Wave Field, Jun Zhang, R. E. Randall, L. Chen, C. A. Spell, J. K. Longridge and M. Ye, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p150-164.

An Offshore Island Wave Sheltering Model, Andrew L. T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p695-707.

Predicting Wave Spectra With a Third Generation Spectral Wave Model, Charles L. Vincent, Ph.D., Robert E. Jensen, Ph.D. and Hans C. Graber, Ph.D., (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p420-432.

Probability of Severe Hurricanes Across the Gulf of Mexico, L. E. Chouinard and Chang Liu, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994),

Satellite Observations of Wave Heights in Arabian Sea and Bay of Bengal, Usha Natesan and S. P. Subramanian, WW Nov./Dec. 94, p576-579.

Shoaling of Wave Spectra in Front of Reflective Structures, Ernest R. Smith and Steven A. Hughes, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p642-656.

Wave Attenuation at the Mobile Stable Berm, Gregory L. Williams and Cheryl Burke Pollock, *Ocean Wave Measurement and Analysis*, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p339-351.

Wave Grouping in Locally Generated Seas on Short Fetches, Edward F. Thompson and John Oliver, WW Mar./Apr. 94, p220-225.

Wave Height From Deep Water Through Breaking Zone, J. William Kamphuis, WW July/Aug. 94, p347-367.

Wave Transformation and Load Reduction Using a Small Tandem Reef Breakwater - Physical Model Tests, Andrew Cornett, Etienne Mansard and Edgar Funke, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p1008-1023.

Wave Transformation Measurements at SUPERTANK, David L. Kriebel and Jane M. Smith, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p233-247.

Wave-Height Distribution in Storm Sea: Effect of Wave Breaking, Malcolm O. Green, WW May/June 94, p283-

Wave measurement

Breaking Wave Measurement by a Void Fraction Technique, Ming-Yang Su and John Cartmill, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p951-962

Buoy Directional Wave Measurements Using Magnetic Field Components, David W. Wang, C. C. Teng and R. Ladner, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p316-329.

A Comparison of Three Wave-Measuring Buoys, Anand Gnanadesikan and Eugene A. Terray, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and

J. Michael Hemsley, ed., 1994), p287-301.

Design and Testing of the NDBC Wave Processing Module, Joel N. Chaffin, William Bell, Kathleen O'Neil and Chung-Chu Teng, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p277-286.

Design of an In-Situ Directional Wave Gage for One Year Deployments, Gary L. Howell, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p264-276.

The Development of a Wave Data Analysis Standard for a Wave Measurement Program, Michael Tubman, Marshall Earle and David McGehee, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p547-553.

Directional Wave Data - Measurements and Modeling Coast of Florida Erosion and Storm Effects Study, Thomas D. Smith and Jon M. Hubertz, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p76-89.

Estimation of Directional Spectra by ML/ME-Methods, Ola Haug and Harald E. Krogstad, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p394-405.

Instrumented Buoy Network Response to Ocean Swell, Theodore Mettlach and David Gilhousen, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p28-44.

Large Scale Measurements of Near Surface Orbital Velocities in Laboratory Waves by Using a Surface Following Device, Stefan Woltering and Karl F. Daemrich, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p770-784.

Measured Total Wave Climate of a Small Craft Harbor, Chuck Mesa, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed.,

1994), p90-104.

Measurement and Analysis of Wave Data in Los Angeles-Long Beach Harbors, James Rosati, III and Paul T. Puckette, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994),

James P. McKinney, (Ocean Wave Measured Time Series, James P. McKinney, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hems-

ley, ed., 1994), p388-393

A Modern Electric Stepgauge for Accurate Wave and Tide Measurement, Harmen C, Botma and John B, Leenhouts, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p708-

NDBC Wave Data-Current and Planned, K. E. Steele and Theodore Mettlach, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), n198-207.

A New Correction Procedure for Shipborne Wave Recorder Data, E. G. Pitt, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hems-

ley, ed., 1994), p726-739.

Numerical Model Verification Using SUPERTANK Data in Surf and Swash Zones, Daniel T. Cox, Nobuhisa Ko-A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p248-262.

Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994, 0-87262-922-8, 1055pp.

On Hurricane-Generated Seas, Michel K. Ochi, (Ocean Wave Measurement and Analysis, Orville T. Magoon,

ed, and J. Michael Hemsley, ed., 1994), p374-387.

Optical Remote Sensing of Wave Surface Kinematics, Stephen Riedl, Richard Seymour and Jun Zhang, (Ocean Wave Measurement and Analysis, Orville T. ed. and J. Michael Hemsley, ed., 1994), p943-950.

Physical Modelling of Multidirectional Waves, A. M. Cornett, M. D. Miles and O. G. Nwogu, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Mi-

chael Hemsley, ed., 1994), p614-629

Shoaling of Wave Spectra in Front of Reflective Structures, Ernest R. Smith and Steven A. Hughes, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and

J. Michael Hemsley, ed., 1994), p642-656.

Short and Long Wave Transformation Modelling in a Large Scale Flume, Luc Hamm and J A. (Dano) Roelvink, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p503-

A Sonobuoy-Sized Expendable Air-Deployable Directional Wave Sensor, Marshall D. Earle, Ralph H. Orton, Harry D. Selsor and Kenneth E. Steele, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p302-315.

J. Michael Heinsley, ed., 1994), p302-313.

Wave Measurement Near Reflective Structures, P. A. D. Bird, M. A. Davidson, G. N. Bullock and D. A. Huntley, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p701-

Wave Monitoring in The Southern California Bight, W. C. O'Reilly, R. J. Seymour, R. T. Guza and D. Castel, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p448-

Wave Run-Up and Reflection on a Permeable Sea Wall, Mitsuo Takezawa, Susumu Kubota and Shintaro Hotta, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p680-

Wave Transformation Measurements at SUPERTANK, David L. Kriebel and Jane M. Smith, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p233-247.

Wave Impacts on Sea Walls and Breakwaters, A. R. Crawford, M. J. Walkden, P. A. D. Bird, G. N. Bullock, P. J. Hewson and J. Griffiths, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p656-670.

Wave propagation

An Adaptive Nine-Point Finite Volume Roe Scheme for Two-Dimensional Saint-Venant Equations, Fayssal Benkhaldoun and Luc Monthe, (Modelling of Flood Propa-gation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p30-44.

Analytical Solutions for Harmonic Wave Propagation in Poroelastic Media, Chris Zimmerman and M. Stern, EM

Oct. 94, p2154-2178.

Calculation of 2D Flood Propagation Using the Program Package Floodsim, W. Bechteler, M. Nujic and A. J. Otto, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p257-267.

Computing Two Dimensional Flood Propagation with a High Resolution Extension of McCormack's Method, F. Alcrudo and P. García Navarro, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro,

ed. and Luigi Natale, ed., 1994), p3-17.

Conservation Properties of the Mild Slope and Boussinesq Equations, Rodney J. Sobey, (Ocean Wave Measure-ment and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p135-149

Discretization Influence on Regularization by Two Localization Limiters, Antonio Huerta and Gilles Pijaudier-

Cabot, EM June 94, p1198-1218.

Dynamic Green's Functions of Homogeneous Poroelastic Half-Plane, T. Senjuntichai and R. K. N. D. Rajapakse, EM Nov. 94, p2381-2404.

Effects of Multiple Modes on Rayleigh Wave Dispersion Characteristics, Kohji Tokimatsu, Shuji Tamura and Hisaya Kojima, GT Oct. 92, p1529-1543.

Evolution of Breaking Directional Spectral Waves in the Nearshore Zone, H. Tuba Ozkan and James T. Kirby, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p849-863

Formation and Propagation of Steep Waves: An Investiga-tive Experimental Interpretation, P. G. Manciola, A. Mazzoni and F. Savi, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi

Natale, ed., 1994), p283-297.

Geographical Information Systems and Remote Sensing: a possible support in 2D modelling of flood propagation, F. F. Amighetti, P. P. Congiatu, A. Di Filippo and P. Molinaro, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p143-155.

Hybrid Noninertia and Statistical Model Versus Hydrody-namic Routing, Hussam E. S. Fahmy and Hubert J. Morel-Seytoux, HY June 94, p706-721.

Instrumented Buoy Network Response to Ocean Swell, Theodore Mettlach and David Gilhousen, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p28-44.

Integral Equation Model for Wave Propagation with Bottom Frictions, Philip L.-F. Liu and Yong-Sik Cho, WW

Nov./Dec. 94, p594-608.

Modelling of Flood Wave Propagation Over Flat Dry Areas of Complex Topography in Presence of Different Infrastructures, P. Molinaro, A. Di Filippo and F. Ferrari, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), 200. 238

NDT Methods for Flaw Detection in Concrete, Nicholas J. Carino, (Cement Manufacture and Use, Paul W. Brown,

ed., 1994), p175-192.

Nearshore Breaking Waves: A Numerical Model, Scott L. Douglass and Juan C. Ortiz, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p864-879.

Nonlinear Decomposition of a 2-D Wave Field, Jun Zhang, R. E. Randall, L. Chen, C. A. Spell, J. K. Longridge and M. Ye. (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994),

Object-Oriented Finite Volume Dam-Break Model, Bochra Ech-Cherif El Kettani and Driss Ouazar, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p186-196.

On the Generation of Infragravity Waves by Shoaling Multidirectional Waves, Okey Nwogu, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Mi-

chael Hemsley, ed., 1994), p1-14. Propagation of Linear Gravity Waves Over Slowly Varying Depth and Currents, Francisco J. Rivero and Agustín S.-Arcilla, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p518-532.

Seismological, Soil and Valley Effects in Kirovakan, 1988 Armenia Earthquake, M. K. Yegian, V. G. Ghahraman and G. Gazetas, GT Feb. 94, p349-365.

Settlement of Footings on Granular Materials: Low and Large Strain Parameters, F. Ahtchi-Ali and J. C. San-tamarina, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1287-1297.

Shoaling of Solitary Waves on Plane Beaches, S. T. Grilli, R. Subramanya, I. A. Svendsen and J. Veeramony, WW

Nov./Dec. 94, p609-628.

Structural Response to 3D Simulated Earthquake Motions in San Bernardino Valley, Erdal Şafak and Arthur Frankel, ST Oct. 94, p2820-2839.

Vibration of Foundations on Incompressible Soils with No Elastic Region, Ronaldo I. Borja and Wen-Hwa Wu, GT Sept. 94, p1570-1592.

Wave Propagation in Ice-Covered Channels, Steven F. Daly, HY Aug. 93, p895-910.

Waves Propagating on an Adverse Jet, Fredric Raichlen, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p657-670

Wave reflection

Comparison of Wave Reflection Equations with Wave-Tank Data, Dennis C. Cotter and Subrata K. Chakrabarti, WW Mar./Apr. 94, p226-232.

Estimating Laboratory Wave Reflection Using Laser Doppler, Steven A. Hughes, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p918-933.

Shoaling of Wave Spectra in Front of Reflective Structures, Ernest R. Smith and Steven A. Hughes, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p642-656.

Simulation of Wave and Beach Profile Change in SUPER-TANK Seawall Tests, William G. McDougal, Nicholas Kraus and Harman Ajiwibowo, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p278-295.

Undertow at SUPERTANK, Jane McKee Smith, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p220-232

Wave Reflection: Field Measurements, Analysis and Theoretical Developments, Mark A. Davidson, Paul A. D. Bird, Geoff N. Bullock and David A. Huntley, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p642-655.

Wave Run-Up and Reflection on a Permeable Sea Wall, Mitsuo Takezawa, Susumu Kubota and Shintaro Hota, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p680-

Wave Runup on and Wave Reflection from Coastal Structures, John P. Ahrens, William N. Seelig, Donald L. Ward and William Allsop, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p489-502.

Wave Setup Near a Seawall: Experiments and a Numerical Model, K. A. Rakha and J. W. Kamphuis, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and

J. Michael Hemsley, ed., 1994), p835-848.

Wave Transformation and Load Reduction Using a Small Tandem Reef Breakwater - Physical Model Tests, An-drew Cornett, Etienne Mansard and Edgar Funke, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p1008-1023.

Wave refraction

ASA.WAVES: An Interactive PC-based Wave Forecasting Tool, Stéphan T. Grilli, T. Opishinski, M. L. Spaulding and T. Isaji, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p890-904.

New Technology in Coastal Wave Monitoring, Richard Seymour, David Castel, David McGehee, Juliana Thomas and William O'Reilly, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p105-123.

An Offshore Island Wave Sheltering Model, Andrew L. Kadib, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994),

p695-707.

Propagation of Linear Gravity Waves Over Slowly Varying Depth and Currents, Francisco J. Rivero and Agustín S.-Arcilla, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994),

A Spectral Wave Model for the Coastal Zone, L. H. Holthuijsen, N. Booij and R. C. Ris, (Ocean Wave Measure-ment and Analysis, Orville T. Magoon, ed. and J. Mi-

chael Hemsley, ed., 1994), p630-641.

The Time Dependent Ray Method for Calculation of Wave Transformation on Water of Varying Depth and Current, Yung Y. Chao, (Ocean Wave Measurement and Analy-sis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p671-679.

Wave runup

Analysis of Selected Prototype Wave and Runup Data, Todd L. Walton, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p913-917.

The Daytona Beach "Large Wave" Event of 3 July 1992, Robert J. Thicke, Robert G. Dean and Andrew W. Gar-cia, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p45-

Hurricane Iniki, A Hindcast, Winds, Windwaves, Swells, Storm Surge, and Wave Run-Up, C. L. Bretschneider, J. D. Agrawal, N. C. Carmella and K. A. Wohlmut, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p772-781

Integral Equation Model for Wave Propagation with Bottom Frictions, Philip L.-F. Liu and Yong-Sik Cho, WW

Nov./Dec. 94, p594-608.

Irregular Wave Run-Up on Composite Rough Slopes, Marek Szmytkiewicz, Ryszard B. Zeidler and Krystian W. Pilarczyk, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p599-613.

King Harbor Mole Repair Redondo Beach, California, Clark B. Adams, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed.,

1994), p283-291.

Numerical Model Verification Using SUPERTANK Data in Surf and Swash Zones, Daniel T. Cox, Nobuhisa Kobayashi and David L. Kriebel, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p248-262.

Shoaling of Solitary Waves on Plane Beaches, S. T. Grilli, R. Subramanya, I. A. Svendsen and J. Veeramony, WW

Nov./Dec. 94, p609-628.

Surf-Similarity Parameter for Breaking Solitary-Wave Runup, Nobuhisa Kobayashi and Entin A. Karjadi, WW Nov./Dec. 94, p645-650.

The TMA Wave-Energy Constraint and Cohesive Shore-Profile Shapes, Charles N. Johnson, (Ocean Wave Meas-urement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p236-250.

Wave Interaction with Semiporous Cylindrical Breakwater, M. K. M. Darwiche, A. N. Williams and K.-H. Wang,

WW July/Aug. 94, p382-403.

Wave Run-Up and Reflection on a Permeable Sea Wall, Mitsuo Takezawa, Susumu Kubota and Shintaro Hotta, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p680-694

Wave Runup on and Wave Reflection from Coastal Structures, John P. Ahrens, William N. Seelig, Donald L. Ward and William Allsop, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p489-502.

Wave Runup on Smooth and Rock Slopes of Coastal Structures, Jentsje W. van der Meer and Cor-Jan M.

Stam, WW Sept./Oct. 92, p534-550.

Analysis of Prototype Long Period Waves for Los Ange-les/Long Beach Harbor Resonance Studies, William C. Seabergh, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994),

Buoy Directional Wave Measurements Using Magnetic Field Components, David W. Wang, C. C. Teng and R. Ladner, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994),

A Comparison of Three Wave-Measuring Buoys, Anand Gnanadesikan and Eugene A. Terray, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p287-301.

A Comparison of Wave Statistics in Uni- and Multidirectional Shoaling Seas, Andrew M. Cornett and Okey G. Nwogu, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p458-473.

Comparisons of Directional Wave Analysis Methods, Taerim Kim, Lihwa Lin and Hsiang Wang, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and

J. Michael Hemsley, ed., 1994), 554-568.
Design and Testing of the NDBC Wave Processing Module, Joel N. Chaffin, William Bell, Kathleen O'Neil and Chung-Chu Teng, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hems-ley, ed., 1994), p277-286.

Design Waves and Wave Spectra for Engineering Applica-tions, Chung-Chu Teng, Gerald L. Timpe, Ian M. Palao and David A. Brown, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p993-1007.

Equilibrium-Range Spectrum of Waves Propagating on Currents, Kyung Duck Suh, Yoo-Yin Kim and Dong Young Lee, WW Sept./Oct. 94, p434-450.

Estimation of Directional Spectra by ML/ME-Methods, Ola Haug and Harald E. Krogstad, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p394-405.

Estimation of Wave Directional Spectra from Pitch-Roll Buoy Data, F. P. Brissette and I. K. Tsanis, WW Jan./

Feb. 94, p93-115.

Evaluation of a Third-Generation Wave Model for the U.S. Atlantic Coast, R. E. Jensen, S. H. Houston, C. L. Vincent and M. D. Powell, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p433-447.

Evolution of Breaking Directional Spectral Waves in the Nearshore Zone, H. Tuba Özkan and James T. Kirby, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p849-

863

Evolutionary Fourier Analysis of Wave Data, Leon E. Borgman, Mihail Petrakos and Chao Li, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p708-725.

Experimental Study of Monochromatic Wave-Ebb Current Interaction, Michael J. Briggs and Philip L. -F. Liu, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p474-

Extensive Comparison of Directional Wave Analysis Methods From Gauge Array Data, Michel Benoit, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p740-754.

Field Test of Buried Ocean-Wave Directional Spectrometer System, Tom Nye and Tokuo Yamamoto, WW Sept./

Oct. 94, p451-467.

Instrumented Buoy Network Response to Ocean Swell, Theodore Mettlach and David Gilhousen, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p28-44.

Low-frequency Fluctuations of Suspended Sand and Wave Groups in the Surf Zone, R. D. Kos'yan, S. Yu. Kuzne-tsov and N. V. Pykhov, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p352-363.

Measurement and Analysis of Wave Data in Los Ange les-Long Beach Harbors, James Rosati, III and Paul T. Puckette, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p223-235.

A New Correction Procedure for Shipborne Wave Recorder Data, E. G. Pitt, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p726-739.

Nonlinear Effects on Wave Envelope and Phase, M. Aziz Tayfun, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p755-768.

Observations of Wind Wave Growth by ERS-1 SAR, Chich Y. Peng and Antony K. Liu, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Mi-

chael Hemsley, ed., 1994), p934-942 On Hurricane-Generated Seas, Michel K. Ochi, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p374-387.

Physical Modelling of Multidirectional Waves, A. M. Cornett, M. D. Miles and O. G. Nwogu, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Mi-

chael Hemsley, ed., 1994), p614-629.

Wave Spectra With a Third Generation Spectral
Wave Model, Charles L. Vincent, Ph.D., Robert E. Jensen, Ph.D. and Hans C. Graber, Ph.D., (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p420-432.

The Re-derivation of the NDBC Wind-Wave Algorithm,

Ian M. Palao and David B. Gilhousen, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and

J. Michael Hemsley, ed., 1994), p569-575.

S. Mother Herseley, ed., 1994, p. 1909-31, p. 1909-31,

Shoaling of Wave Spectra in Front of Reflective Structures, Ernest R. Smith and Steven A. Hughes, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and

J. Michael Hemsley, ed., 1994), p642-656.

A Sonobuoy-Sized Expendable Air-Deployable Direction-al Wave Sensor, Marshall D. Earle, Ralph H. Orton, Harry D. Selsor and Kenneth E. Steele, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and

J. Michael Hemsley, ed., 1994), p302-315.

Spectral and Parametric Wave Models of Lake Erie, David
J. Welsh and Keith W. Bedford, (*Hydraulic Engineering* '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p217-221.

Spectral Boussinesq Modelling of Breaking Waves, J. A. Battjes, Y. Eldeberky and Y. Won, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p813-820.

A Spectral Wave Model for the Coastal Zone, L. H. Hol-Specual wave wider for the Coastat Zoffe, L. Hot-thuijsen, N. Booij and R. C. Ris, (Ocean Wave Measure-ment and Analysis, Orville T. Magoon, ed. and J. Mi-chael Hemsley, ed., 1994), p630-641.

The Time Dependent Ray Method for Calculation of Wave Transformation on Water of Varying Depth and Current, Yung Y. Chao, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p671-679

Wave Height From Deep Water Through Breaking Zone, J. William Kamphuis, WW July/Aug. 94, p347-367.

Wave Measurement Near Reflective Structures, P. A. D. Bird, M. A. Davidson, G. N. Bullock and D. A. Huntley, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p701-

Wave-Height Distribution in Storm Sea: Effect of Wave Breaking, Malcolm O. Green, WW May/June 94, p283-301.

Wave tanks

Breaking Wave Measurement by a Void Fraction Technique, Ming-Yang Su and John Cartmill, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and

Measurement and Analysis, Orvine 1. Mingoon, ed. and J. Michael Hemsley, ed., 1994), p951-962.

Comparison of Wave Reflection Equations with Wave-Tank Data, Dennis C. Cotter and Subrata K. Chakrabarti, WW Mar/Apr. 94, p226-232.

Decay of Random Waves on Non-Monotonic Profiles,

Magnus Larson, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p503-517.

Estimating Laboratory Wave Reflection Using Laser Doppler, Steven A. Hughes, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hems-

ley, ed., 1994), p918-933

Experimental Study of Undertow and Turbulence Intensity Under Irregular Waves in the Surf Zone, Nels J. Sultan and Francis C. K. Ting. (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p602-613

Wave Runup on and Wave Reflection from Coastal Structures, John P. Ahrens, william N. Seelig, Donald L. Ward and William Allsop, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p489-502. Wave velocity

Automated Surface Wave Method: Inversion Technique, Deren Yuan and Soheil Nazarian, GT July 93, p1112-

Breaking Wave Persistence in Parametric Surf Zone Models, Howard N. Southgate and Helen M. Wallace, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p543-

Experimental Study of Undertow and Turbulence Intensity Under Irregular Waves in the Surf Zone, Nels J. Sultan and Francis C. K. Ting, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hems-

ley, ed., 1994), p602-613.

Formation and Propagation of Steep Waves: An Investiga-tive Experimental Interpretation, P. G. Manciola, A. Mazzoni and F. Savi, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p283-297.

Second Order Directional Wave Kinematics in Shallow Water, Jagat N. Sharma and R. G. Dean, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and

J. Michael Hemsley, ed., 1994), p165-179.

Second Order Irregular-Wave Generation in Flumes -Computation of Transfer Functions by an Asymptotic Summation Method, Hemming A. Schäffer, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p784-797.

Analyzing Wave and Storm Surge Impacts from Hurricane Andrew on the Dade County Beach Erosion Control and Hurricane Protection Project, Kimberley A. Taplin and Jon M. Hubertz, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p587-596.

Estimation of V_{max}, and Identification of the Iniki Overwash Line on Kaua'i, C. H. Fletcher, T. A. Schroeder, G. M. Barnes, B. M. Richmond and M. A. Hampton, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p746-755.

Estimation of Wave Directional Spectra from Pitch-Roll Buoy Data, F. P. Brissette and I. K. Tsanis, WW Jan./

Feb. 94, p93-115.

Forces on Vibrating Cylinder Near Wall in Current and Waves, B. M. Sumer, J. Fredsøe, B. L. Jensen and N. Christiansen, WW May/June 94, p233-250.

The Generation and Use of Site Specific Wave and Current Databases for Dredged Material Fate Predictions, Norman W. Scheffner, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p190-199.

Irregular Wave Overtopping of Revetments in Surf Zone Nobuhisa Kobayashi and Andrew W. Raichle, WW Jan./Feb. 94, p56-73.

Measurement and Hindcast of Hurricane Iniki Coastal In-undation, Steven Yamamoto, Scott Sullivan and Eiji Nakazaki, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p756-771.

NDBC Wave Data-Current and Planned, K. E. Steele and Theodore Mettlach, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p198-207.

Numerical Modeling of Waves in Harbors, Edward F. Thompson, H. S. Chen and Lori L. Hadley, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p590-601.

Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994, 0-

87262-922-8, 1055pp.

Opening Remarks by Robert L. Wiegel, Robert L. Wiegel, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p194-197

A Second-Generation Wave Model for Coastal Wave Prediction, J. A. Ewing and R. C. Hague, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p576-589.

Sines Breakwaters Monitoring Program, C. Pita, F. Abecasis and A. Fernandes, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p408-427.

The Swept Sine Wave Testing Technique in Hydrodynam-ic Applications, Nicholas Haritos, Okey Nwogu and Andrew M. Cornett, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p533-546.

Theoretical study of unstable waves in the rapids of the river, H. Kyotoh, (*Hydraulic Engineering* '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1265-1269.

Wave Grouping in Locally Generated Seas on Short Fetches, Edward F. Thompson and John Oliver, WW Mar./Apr. 94, p220-225.

Wave-Induced Oscillation in Harbor with Porous Break-

waters, Xiping Yu and Allen T. Chwang, WW Mar./Apr. 94, p125-144.

West Breakwater Maintenance, H. Ligteringen and Fernando A. S. Oliveira, (Reconstruction of the West Breakwa-ter at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p428-439.

Unexploded Ordnance (UXO) and Dredging, Timothy Welp, James Clausner, Raymond Pilon, Joan Pope and Richard Lewis, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p48-55.

Weather

- Assessing Nassau County's Water Conservation Program, Mark Maimone and Michael Labiak, WR Jan./Feb. 94, p90-100.
- Creating Powder-Coatings Guidelines, ET Dec. 94/Jan. 95, p10.
- A Space Station of Mars, Kimberly Butler, (Engineering, Construction, and Operations in Space IV, Rodney G.
 Galloway, ed. and Stanley Lokaj, ed., 1994), p787-792.
 Warning System Will Report Low Visibility to Drivers, ET
- Dec. 94/Jan. 95, p7.
 What Do the Space Needle, the Peace Bridge and A Launch Pad Have in Common?, CE Dec. 94, p84.

Weather forecasting

- BPA Realtime Hydrologic Forecasting System for the Co-lumbia River Basin, L. von der Heydt, L. E. Brazil and K. Jawed, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p5-8.
- New Program for the Marine Observation and Prediction Center of the Central Weather Bureau, Beng-chun Lee, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p124-
- Operational Interactive Hydrologic Forecasting with the National Weather Service River Forecast System, Donna Page and George F. Smith, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p1-4.
- Short-Term Forecasts for Lake Erie, John G. W. Kelley, Chieh-Cheng J. Yen, Jay S. Hobgood, David J. Schwab and Keith W. Bedford, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p227-231.

Control of Aging Processes in Wastepaper Fiber Reinforced Cement, Parviz Soroushain, Jong-Pil Won and Jer-Wen Hsu, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p539-544.

Fatigue Strength of Weathered Rolled Beam Made of A588 Steel, Pedro Albrecht and Camille Shabshab, MT Aug. 94, p407-428.

Kinetics of SO2-Dolomite Reaction: Application of Random Pore Model, Sanjeev S. Tambe, Srinivas S. Yerrapragada and K. L. Gauri, MT Feb. 94, p65-77.

Monitoring and Predicting Corrosion of Weathering Steel, Richard D. Granata, James C. Wilson and John W. Fisher, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1209-1216.

Residual Soil Settlment Related to the Weathering Profile, George F. Sowers, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1689-1702.

Strontium Isotope Geochemistry of Soil and Playa Deposits Near Yucca Mountain, Nevada, Brian D. Marshall and Shannon A. Mahan, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2685-2691.

What Do the Space Needle, the Peace Bridge and A Launch Pad Have in Common?, CE Dec. 94, p84.

Design of Prestressed Hollow Core Slabs with Reference to Web Shear Failure, Lin Yang, ST Sept. 94, p2675-2696. Local Web Crippling of Unstiffened Multi-Cell Box Sections, Mark R. Kaczinski, Christopher R. Schneider, Robert J. Dexter and Le-Wu Lu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p343-348.

Space-Frame Pyramid, Michael D. Griffin, Michael R. Patterson and Tejav J. DeGanyar, CE Nov. 94, p68-70.

Vertical Pavement Strain as Means of Weighing Vehicles, J. G. Marsh and R. J. Jewell, TE July/Aug. 94, p617-632.

Cause of Deformed Shapes in Cooling Towers, Jean-François Jullien, Waeil Aflak and Yvan L'Huby, ST May 94, p1471-1488.

Overweight Trucks and Safety of Bridges, Gongkang Fu and Osman Hag-Elsafi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p284-289.

Poisson Effect in Extensive Cables with Both Ends Fixed, John V. Huddleston and Hee-Jung Ham, EM July 94, p1590-1595.

Vertical Pavement Strain as Means of Weighing Vehicles, J. G. Marsh and R. J. Jewell, TE July/Aug. 94, p617-632.

Optimum Design of Airport Enplaning Curbside Areas, Mahmoud S. Parizi and John P. Braaksma, TE July/Aug. 94, p536-551.

Representation of Spatial Variability of Rainfall in Aggreated Rainfall-Runoff Models, Paolo Bartolini and Juan B. Valdés, HY Oct. 94, p1199-1219.

Variability Response Functions of Stochastic Plane Stress/ Strain Problems, Friedrich J. Wall and George Deodatis, EM Sept. 94, p1963-1982.

Automated Field Irrigation System Using Side Weirs, R. Singh and T. Satyanarayana, IR Jan./Feb. 94, p48-59.

- Characteristics of Circular-Crested Weir, Amruthur S. Ramamurthy and Ngoc-Diep Vo, HY Sept. 93, p1055-
- de St-Venant Channel Routing in Distributed Watershed Modeling, Fred L. Ogden, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p492-496.

Discharge Coefficient of Rectangular Side Weirs, R. Singh, D. Manivannan and T. Satyanarayana, IR July/Aug. 94,

A Fish Bypass Screen at Puntledge Project, Herbert Louie, John Taylor and Larry J. Swenson, (Hydraulic Engineer-ing '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p442-446. An Improved Design of Fishways Under High Variation of

Headwater, Kuo-Cheng Hsieh, Sue-Jen Wu and Che-Yuan Huang, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p457-461.

Momentum Model of Flow Past Weir, Amruthur S. Ramamurthy, Ngoc-Diep Vo and German Vera, IR Nov./Dec. 92, p988-994.

Practical Constant-Accuracy Linear Weir, K. Keshava Murthy and M. N. Shesha Prakash, IR May/June 94, p550-562.

President Clinton Honors Federal Design Winners, CE July 94, p14,16.

Regulation of Flow Downstream of Weirs, Boualem Hadjerioua, Tony Rizk, Emmett M. Laursen and Gary Hauser, HY Mar. 94, p347-360. Side-Weir de-Weir Analysis Using Elementary Discharge Coefficient, Prabhata K. Swamee, Santosh K. Pathak and Masoud S. Ali, IR July/Aug. 94, p742-755.

Subcritical Flow Over Rectangular Side Weir, Prabhata K. Swamee, Santosh K. Pathak, Mukesh Mohan, Sanjai K. Agrawal and Masoud S. Ali, IR Jan./Feb. 94, p212-217. Supercritical Flow in Circular-Shaped Side Weir, Willi H.

Hager, IR Jan./Feb. 94, p1-12.

Using Drop Structures for Stream Gaging, Bobby J. Brown, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p21-26.

Using the Weir Back as an Energy Dissipator, Abdelkawi Khalifa, (*Hydraulic Engineering* '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p436-441.

Welded joints

Wedded Joints Using Boundary/Finite Element Alternating Methods, Ruijia Mu and D. V. Reddy, (Computing in Civil Engineering, Khalii Khozeimeh, ed., 1994), p1920-1927.
Welded Joints for Robotic On-Orbit Assembly of Space

Structures, William K. Rule and Frank P. Thomas, AS Apr. 94, p209-224.

Welding

Consideration of Calculated and Measured Weld Metal Cooling Rates for Welding High Strength Steels, Joseph M. Blackburn and Gene L. Franke, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1225-1232

Focusing on Fatigue, Peter B. Keating, CE Nov. 94, p54-

MPC Closure Weld Model Study, Brain J. Kruse, Joe B. Stringer and Giles G. Childress, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p435-443.

Ship Fabrication Innovations (Naval & Commercial), Raymond H. Juers and Kevin Lynaugh, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed.,

1994), p344-350.

Welded Joints for Robotic On-Orbit Assembly of Space Structures, William K. Rule and Frank P. Thomas, AS Apr. 94, p209-224.

Welds

Application of High-Performance Steel in New and Retrofit Structures, Robert J. Dexter, Le-Wu Lu and John W. Fisher, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p336-343.

Bond Strength of Welded Wire Fabric in Concrete Bridge

Decks, Bilal M. Ayyub, Naji Al-Mutairi and Peter Chang, ST Aug, 94, p2520-2531.

Splicing Strength of Welded Steel Mesh in Concrete Bridge Decks, Bilal M. Ayyub, Naji Al-Mutairi and Peter Chang, ST Aug, 94, p2532-2546.

Welded Wire Fabric for Bridges II. : Fatigue Strength, Bilal M. Ayyub, Peter C. Chang and Naji A. Al-Mutairi, ST June 94, p1882-1892.

Welded Wire Fabric for Bridges. I: Ultimate Strength and Ductility, Bilal M. Ayyub, Peter C. Chang and Naji A. Al-Mutairi, ST June 94, p1866-1881.

Well construction

Design, Construction, and Maintenance of Relief Wells, US Army Corps of Engineers, 1993, 0-87262-955-4, 90pp.

Well performance

Application and Benefits of Aquifer Recharge in Santa Fe, New Mexico, Kevin Bral, Mark Fenton and Mike Slota, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p21-24.

Wells

Aquifer Storage and Recovery at the Centennial Water and Sanitation District, Andrea Aikin, Courtney Hemenway and Paul Grundemann, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry

N. Tuvel, ed., 1994), p592-595.

Asymmetric Flow into Well by Finite Elements, Kamala K.

Singh and Shambhu P. Dasgupta, IR May/June 94,

p520-533.

Confined Aquifer Parameters from a Pump Test Near an Impermeable Boundary, Stephen J. Burges, HY July 93, p838-845.

Design, Construction, and Maintenance of Relief Wells, US Army Corps of Engineers, 1993, 0-87262-955-4,

Evaluation of the Pagosa Springs Geothermal Reservoir and Implications of Potential Additional Reservoir Development, Jon Ford and Dennis McGrane, (Water Policy and Management: Solving the Problems, Darrell G.

Fontane, ed. and Harry N. Tuvel, ed., 1994), p376-379. Ground-Penetrating Radar For Salt-Affected Soil Assess ment, Sun F. Shih and Don L. Myhre, IR Mar./Apr. 94,

p322-333.

Oil and Gas Exploration Near Yucca Mountain, Southern Nevada, John A. Grow, Charles E. Barker and Anita G. Harris, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1298-1315.

Recent Advances In Well Hydraulics, Otto J. Helweg and S. Sunita, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel,

ed., 1994), p608-611.

Rehabbing for Remediation, David Banton and Robert Anderson, CE Mar. 94, p64-65. Risk Management in Wellhead Protection, David A. Chin

and Prasad V. K. Chittaluru, WR May/June 94, p294-

Transient Radius of Influence Model, Shu Tung Chu, IR Sept./Oct. 94, p964-969.

Sept. Oct. 39, 2004-205. Use of Hydraulic Control Valves in Deep-Well Pump Station Design Under Low/No Discharge Pressure, Jorge A. Garcia and Les Coffman, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p62-72.

West Virginia

Diesel May Clean Coal-Powered Plants, ET Oct./Nov. 94, p10-11.

Epoxy-Coated Rebar Scores in West Virginia Study, CE Nov. 94, p12.

Erosion and Deposition by Debris Flows in Mountainous Channels on North Fork Mountain, Eastern West Virginia, Daniel A. Cenderelli and J. Steven Kite, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p772-776.

OSHA May View Injury Information, CE July 94, p25.

Weston, Roy F.

ASCE Elevates 13 of Its Own to Honorary Membership, NE May 94, p3.

Atlanta Ceremony Celebrates 13 New Honorary Members of ASCE, NE Dec. 94, p2-3.

Wetlands

Agriculture and Soil Conservation, Billy M. Teels, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p211-218.

Beneficial Uses of Dredged Material: Part of the Solution to Restoration of Louisiana's Coastal Wetlands, Linda Glenboski Mathies, (Dredging '94, E. Clark McNair, Jr.,

ed., 1994), p626-630.

Climate Warming and Great Lakes Management, Benjamin illiate Waining and Great Lakes Manageria, Bullian F. Hobbs, Philip T. Chao, Mohammed Nayal and William T. Bogart, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994, p295-316.

Decision Support System for Wetland Development at a Landscape Level, Luis A. Garcia, Rolando Vadas, Steffen Meyer, John Ternlund and Jack Cunningham, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

Development of a Wetland/Riparian Resource Model for the Missouri River System, C. McShane, D. Becker, R. Tressler, J. Cannon and J. Rude, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p746-749.

Environment-Irrigation Trade-Offs and Risks, Norman J. Dudley, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p280-294.

Environmental Modeling of Coastal Wetlands, Lisa C. Roig and Robert A. Evans, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p522-535.

Guidance for Wetland Restoration with Dredged Material, Michael R. Palermo and Elba A. Dardeau, Jr., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p956-960.

Habitat Restoration Using Dredged Material: The Sonoma Baylands Wetland Demonstration Project, Scott P. Miner, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p928-937.

Heavy Metal Removal Using Peat/Wetland Treatment, Suzanne Murawski, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p408-414.

Joint Pond-Wetland System Performance in Colorado, Ben

Urbonas, Bao Vang and Jay Carlson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p384-387.

Laws and Regulations Regarding Wetland Mitigation and Mitigation Banking, John D. Rogner, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and

Fred A. Klancnik, ed., 1994), p333-341.

Modeling Pollutant Fate and Transport in Constructed Wetlands, Russell T. Brown, Joanne Field, Michael J. Zanoli and Ron W. Crites, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p532-539.

New Applications and Practices for Beneficial Uses of Dredged Material, M. C. Landin, J. Fowler and H. H. Allen, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994),

p526-536.

On "Solid" Golden Pond, Ronald J. Arceneaux and Dale L. Watson, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994),

Performance Evaluation of Constructed Wetland Treatment System, L. B. Sumrall, R. Y. Surampalli, S. K. Banerji and D. M. Sievers, CR June 94, p35-46.

Planting of Large-Scale Marsh Projects, Eddie Seidenstick-er, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p828-832

Pot-Nets, Delaware, Wetland Habitat and Beneficial Uses of Dredged Material Project, Edward T. Fulford and Robert E. Tunnell, Jr., (Dredging '94, E. Clark McNair,

Jr., ed., 1994), p1451-1460.

Purpose and Perspective for the Conference: "National Water Resources Regulation - Where is the Pendulum Now?", Jonathan E. Jones, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p15-19.

Reclaiming Water With Wetlands, Christie Moon Crother, CE July 94, p52-55.

The Rest of the Best, Josh Kosman, CE July 94, p44-48. Restoration of Wetland Ecosystems: A Challenge to Our Nation's Civil Engineers, James T. B. Tripp, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p229-

Restoring the Everglades, James Best Jackson, Larry Fink and Gary Goforth, CE Mar. 94, p52-55.

Riparian Wetlands and Flood Stages, F. Douglas Shields, Jr. and Charles M. Cooper, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p351-355.

Role of Constructed Wetlands in Water Resources Management, Christie Moon Crother, John S. Crossman and P. Ravishanker, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p669-672.

Site Selection for Beneficial Uses Of Dredged Material in Galveston Bay, Texas, USA, Russell Swafford and Richard F. Gorini, (*Dredging '94*, E. Clark McNair, Jr.,

ed., 1994), p399-409.

Tug Fork Flood Plain Modifications and Wetlands Mitigation, M. A. Ports, D. D. Dee, Jr. and C. Riling, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p766Water Polishing by Constructed Wetland Ecosystems, Danuta Leszczynska and Andrew A. Dzurik, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p710-713.

Wetland Loss Rates and Agricultural Drainage, Aaron J. Douglas, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel,

ed., 1994), p545-548.

A Wetland Mitigation Bank - An Economic Model, Douglas L. Lashley, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p352-359.

Wetland Mitigation Banks -- A Win-Win Situation, Robert D. Sokolove and P. Robert Thompson, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and

Fred A. Klancnik, ed., 1994), p342-351.

Wetting front

Air Entrapment and Water Infiltration in Two-Layered Soil Column, H. Latifi, S. N. Prasad and O. J. Helweg, IR Sept./Oct. 94, p871-891.

Infiltration-Advance Equation for Finite Linear Source, William O. Rasmussen, IR July/Aug. 94, p796-812

Wetting Phase Permeability in a Partially Saturated Horizontal Fracture, M. J. Nicholl and R. J. Glass, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2007-

Behavior of Cast-Iron Spillway Gate Wheels, Dimos Po-lyzois and Walter J. Muzyczka, MT Nov. 94, p495-512.

Interface Shear Stress in Overlaid Concrete Pavements, C. M. Lau, T. F. Fwa and P. Paramasivam, TE Mar/Apr.

94, p163-177

Wheel Space Station for 2025, Jason Hand and David Hargis, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p846-852.

Nonlinear Stochastic Response and Reliability of Secondary Systems, C. D. Huang, W. Q. Zhu and T. T. Soong, EM Jan. 94, p177-196.

Statistical Response of a Class of Hysteretic Systems, I. I. Orabi and G. Ahmadi, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p405-410.

Stochastic Vehicle-Queue-Load Model for Large Bridges Ove Ditlevsen and Henrik O. Madsen, EM Sept. 94,

Traffic Loads on Large Bridges Modeled as White-Noise Fields, Ove Ditlevsen, EM Apr. 94, p681-694.

Dynamic Compaction to Remediate Liquefiable Embank-ment Foundation Soils, Karl Dise, Michael G. Stevens and J. Lawrence Von Thun, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p1-25

Performance of Three Large-Diameter Oil Tanks on Soft Clay, Mamdouh Hamza, John R. Davie and Michael R. Lewis, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and

Guy Y. Félio, ed., 1994), p923-936.

Performance of Wick Drains Installed by Vibration, Richard P. Long, Leo F. Fontaine and Bruce Olmstead, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1193-1201.

Settlement Predictions at a Florida Port Facility, Thomas E. Selfridge and Kirk A. McIntosh, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p571-

583

Settlement Predictions Using Piezocone, J. R. Davie, H. Senapathy and W. Murphy, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p818-829.

Vacuum-Assisted Consolidation of a Hydraulic Landfill, A. Jacob, S. Thevanayagam and E. Kavazanjian, Jr., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1249-1261. Wando Terminal Ground Improvement Program, James Drew Hussin and Forrest Foshee, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1416-1425.

Widrig, Francis F.

Charles A. Parthum Is 1994 Nominee for ASCE President-Elect, NE July 94, p3.

Historic Yorktown: New Bridge Keeps Old Design, Mi-chael J. Abrahams, CE Nov. 94, p46-47.

Impacts of Low Flows on the Alluvial Rivers of the Southwest Region of Bangladesh, Daryl B. Simons, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p125-129.

Missouri River Least Tern and Piping Plover Model Development, R. Tressler, R. Fairbanks, D. Latka, J. Glassley, K. Engel and J. Rude, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p750-753.

Wildlife conservation

Fishy Business, John Prendergast, CE Nov. 94, p60-63.

Wildlife habitats

Developing Design Parameters for Constructing Ecologically Functional Marshes Using Dredged Material in Galveston Bay, Texas, Lawrence P. Rozas and Roger J. Zimmerman, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p810-822.

Development of a Wetland/Riparian Resource Model for the Missouri River System, C. McShane, D. Becker, R. Tressler, J. Cannon and J. Rude, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p746-749.

Do We Need More Waterbird Nesting Islands in Galveston Bay, Texas? (and if so, how and where do we build them?), Phil Glass, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p796-809.

Enhancing Habitat at an Onshore Dredge Disposal Site, Gary W. Oates, William J. Silva and Gregory P. Mailho, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1461-1470.

Habitat Considerations: Galveston Bay Demonstration Marsh, Andrew V. Sipocz, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p823-827.

Habitat Restoration Using Dredged Material: The Sonoma Baylands Wetland Demonstration Project, Scott P. Miner, (Dredging '94, E. Clark McNair, Jr., ed., 1994),

Instream Flow Strategies for Operation of the Federal Central Valley Project, Serge Birk, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p315-318.

Plans, Design, and Construction of a 100-Hectare Intertidal Demonstration Marsh Using Large-Scale Cutter Head Dredging Equipment in Galveston Bay, Texas, Keith P. Kindle, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p833-842.

Poplar Island Reclamation and Beneficial Uses of Dredged Material, Edward T. Fulford, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1406-1415.

Water and Wildlife Enhancement with Land Retirement, Earl Ekstrand and Richard Johnson, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p541-544.

Wind Lake Improvement Plan Dredging Project Wind Lake, Wisconsin, Robert W. Carr and Kathy Aron, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p141-144.

Bridge Buffeting by Skew Winds in Erection Stages, Robert H. Scanlan, EM Feb. 93, p251-269.

Coastal Engineering Data Retrieval System (CEDRS), Danielle S. McAneny and Doyle L. Jones, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p330-338.

Erosion Hazards and Coastal Construction Deficiencies Observed on Kauai After Hurricane Iniki, A. Todd Davison, Charles E. Bornman and Melvin Nishihara, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p736-745.

Evaluation of a Third-Generation Wave Model for the U.S. Atlantic Coast, R. E. Jensen, S. H. Houston, C. L. Vincent and M. D. Powell, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p433-447.

Evaluation of Roof Sheathing Fastening Schedules for High Wind Uplift Pressures, Thomas P. Cunningham, Jr., (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p330-339.

A Knowledge-Based Computer System for Financial Wind Risk Management, Auguste C. Boissonnade and Surya K. Gunturi, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2191-2198.

Knowledge-Based System for Wind Damage to Building Kishor C. Mehta, Douglas A. Smith and Ronald H. Cheshire, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p726-735.

Lateral Load Resisting Systems for Circular Buildings, Robert J. McNamara and Brent R. Goldstein, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p636-641.

Mixed-Layer Hydrothermal Reservoir Model, Poshu Huang, Joseph L. DiLorenzo and Tavit O. Najarian, HY July 94, p846-862.

Numerical Model Verification on Tidal Current in Tokyo Bay, Yoshitaka Fukui, Toshio Kodama and Mutsuto Kawahara, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p880-884

A Second-Generation Wave Model for Coastal Wave Prediction, J. A. Ewing and R. C. Hague, (*Ocean Wave Measurement and Analysis*, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p576-589.

Testing Methods for Roof Systems, Phillip J. Smith, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p340-349.

Wave Monitoring in The Southern California Bight, W. C O'Reilly, R. J. Seymour, R. T. Guza and D. Castel, (Ocean Wave Measurement and Analysis, Orville Magoon, ed. and J. Michael Hemsley, ed., 1994), p448-

Wind-Driven Dispersion in New Jersey Coastal Waters, A. K. M. Quamrul Ahsan, Michael S. Bruno, Lie-Yauw Oey and Richard I. Hires, HY Nov. 94, p1264-1273.

Wind bracing

Empirical Performance Comparison for Symbolic and Subsymbolic Learning Systems, Tomasz Arciszewski, Adam Borkowski, Tomasz Dybala, Janusz Racz and Piotr Wojan, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1075-1082.

Wind direction

Assessment of Building Damage Sustained During Hurricane Iniki (Comparison with Hurricane Iwa), Michael K. H. Yee and Arthur N. L. Chiu, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p102-110.

The Aeolus Project: Measuring Coastal Wind and Sedi-ment Systems, D. J. Sherman, B. O. Bauer, R. W. G. Carter, D. Jackson, J. McCloskey, R. G. D. Davidson-Arnott, P. A. Gares, N. L. Jackson and K. F. Nordstrom, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p476-

Breaking Wave Measurement by a Void Fraction Technique, Ming-Yang Su and John Cartmill, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p951-962.

Causes of Roof Covering Damage and Failure Modes: Insights Provided by Hurricane Andrew, Thomas Lee Smith, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p303-312.

Characterization of an ER Active Member, Henri P. Gavin and Robert D. Hanson, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p863-868.

Coastal Circulation and Sedimentation During Severe Storms, Timothy R. Keen, Scott M. Glenn and Rudy L. Slingerland, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p279-293.

Constitutive Model for Viscoelastic-Fluid Dampers, Nicos Makris, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p857-862.

Criteria for Acceptable Wind-Induced Motions, Nicholas Isyumov, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p642-647.

Critique - Manufactured Housing Session, Frank Walter, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p203-212.

Damping Systems for Controlling Wind Induced Motions of Structures, Ahsan Kareem and Yukio Tamura, (Struc tures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p845-850.

Design and Analysis of the 712 Fifth Avenue Structure, Louis A. Occhicone and Stanley Wojnowski, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1556-1561.

Different Methods to Compute Pollutant Dispersion Around Buildings, R. Panneer Selvam and Alan H. Huber, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p92-98.

Hurricane Andrew - The Ultimate Curtain Wall Test, James Hayes Larkin, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p424-429.

Hydrodynamic Processes on the Lower Shoreface of the Dutch Coast, Piet Hoekstra and Klaas T. Houwman, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p852-

Identification of Aeroelastic Parameters of Flexible Bridges, Partha P. Sarkar, Nicholas P. Jones and Robert H.

Scanlan, EM Aug. 94, p1718-1742.

Improved Computer Simulation of 3D Wind Flow Around a Building, Y. S. Zhou and T. Stathopoulos, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

Improvements to Residential Construction on Kauai After Iniki, Ken K. Hayashida and Dennis K. Hanatani, (Hur-ricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p617-625.

The Manufactured Home Dilemma, James R. McDonald, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad So-

tani, ed., 1994), p195-202.

Measurement and Hindcast of Hurricane Iniki Coastal Inundation, Steven Yamamoto, Scott Sullivan and Eiji Nakazaki, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p756-771.

Methods to Control Wind-Induced Building Motions, Ahsan Kareem, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p654-659

Multi-mode Aerodynamic Analysis of Long-Span Bridges, Nicholas P. Jones, Anurag, Jain and Robert H. Scanlan, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p894-899.

Numerical Decomposition of Eulerian Residual Circulation in Long Island Sound, Richard A. Schmalz, Jr., (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p294-308.

Numerical Simulations of the CCS under the Joint Effects of Coastal Geometry and Surface Forcing, Yuhe Song and Dale Haidyogel. (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p216-234.

One Engineer's Wish List for Hurricane Hazard Mitiga-tion, Ronald F. Zollo, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p268-277

Performance of Commercial Masonry Structures in Hurrierformance of Commercial Masonry Structures in Hurri-cane Andrew, Geoffrey W. Blaney, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p456-464.

Performance of Manufactured Housing in Louisiana During Hurricane Andrew, Marc L. Levitan, Leighton S. Cochran and Janet E. Levitan, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p166-175.

Performance of Plywood and OSB Sheathing During Hurricanes Andrew and Iniki, Edward L. Keith, (Hurricanes of 1992: Lessons Learned and Implications for the Fu-ture, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p313-329.

Practical Application of Tuned Liquid Damper for Tall Buildings, Toshihiro Wakahara, Kenji Shimada and Yukio Tamura, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p851-856.

Random Vortex Models in Wind Engineering, George Turkiyyah, Dorothy Reed and Jiyao Yang, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p99-106.

Redefining the Roles Insurers and Engineers Play in Hurricane Preparedness and Mitigation, Eugene L. Lecomte, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p1-9.

Reducing the Risks of Severe Windstorm Disaster; an International Perspective, Alan G. Davenport, (Hurricanes of 1992: Lessons Learned and Implications for the Fu-ture, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p147-157.

Salinity and Dissolved-Oxygen Dynamics in a Wind-Driven Estuary, Jerad D. Bales and R. G. Garrett, (Hy-draulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1311-1315. Semianalytical Method for Parametric Study of Tuned Mass Dampers, Y. L. Xu and K. C. S. Kwok, ST Mar. 94, p747-764.

Shelters for Hurricane Refuge, Herbert S. Saffir, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p241-248.

A Statistical Analysis of Wind Damage to Single-Family Dwellings Due to Hurricane Hugo, Serji Amirkhanian, Peter Sparks and Sandy Watford, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1042-1047

Successes and Failures of Metal Building Systems During Hurricane Andrew, Nanette Dean, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p465-471.

Survivability of Manufactured Housing in Hurricanes, John M. Dye, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p176-184.

Synthetic Wind for Investigations in Time-Domain, Imre Kovacs, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p900-905.

Uplift Resistance of Plywood and OSB Roof Sheathing, S. D. Shiff, D. P. Mizzell and M. D. Zaitz, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1054-1059.

Wind Action on Highrise Structures: Codes - Wind Tunnel - Reality, Nicholas Isyumov, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p430-445.

Wind Deflection Probability Analysis, Benjamin J. Biller, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p869-874.

A Wind Driven Lake Circulation Finite Element Model for the Upper St. Marys River, E. M. Yuen and J. A. McCorquodale, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p584-

Wind Forces on Industrial Facilities, Joseph A. Bohinsky and Hikmat E. Zerbe, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1036-1041.

Advances in the Modelling of Long Span Bridges for Wind Effects, J. Peter C. King and Alan G. Davenport, (Structures Congress XII, N. C. Baker, ed. and Barry J. Lood-

no, ed., 1994), p875-880.

Are Building Codes and/or Enforcement Adequate for Hurricane Protection? Lindsey E. Carter and Gary G. Nichols, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p626-631.

Codification of Wind-Pressure Coefficients for Multispan Gable Roofs, Theodore Stathopoulos and Patrick Saathoff, ST Aug. 94, p2495-2519.

Critique on Building Envelope Sessions, Peter R. Sparks, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p529-532.

Diaphragm Action of Cladding in Low-Rise Metal Build-ings, Bala Sockalingam, David Montgomery, Scott Schiff and Peter Sparks, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1048-1053.

Evaluation of Design Wind Loads for Manufactured Homes and Needed Improvements, R. D. Marshall, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p185-194.

Failure of the Turkey Point Unit I Reinforced Concrete Chimney During Hurricane Andrew, W. F. Brannen, T. D. Joseph, Randolph W. Snook and Robert A. Porthouse, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p405-414.

Failures and Failure Mechanisms for Exterior Walls, Gene S. Sanders, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and

Mehrdad Sotani, ed., 1994), p509-518.

Gust Speeds in Hurricanes, R. D. Marshall, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p1457-1462.

The Human Impact of Hurricane Iniki, James K. Mitchell, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p259-267.

Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani,

ed., 1994, 0-7844-0046-6, 808pp.

Impact of Hurricane Andrew on Electrical Generating Facilities, W. F. Brannen, R. L. Adams and J. E. Sheetz. (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p397-404.

Improved Computer Simulation of 3D Wind Flow Around a Building, Y. S. Zhou and T. Stathopoulos, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

Lessons Learned from the Hurricanes of 1992, Ronald A. Cook, Mehrdad Soltani and Timothy A. Reinhold, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p799-802.

Modeling of Extreme Loading by 'Peaks Over Threshold' Methods, J. L. Gross, N. A. Heckert, J. A. Lechner and E. Simiu, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p135-

147

Parametric Study of Axisymmetric Circular-Glass Plates, C. V. Girija Vallabhan, Y. C. Das and Manjunatha Ramasamudra, ST May 94, p1663-1671.

Performance of Metal-Plate-Connected Wood Truss Roof Systems During Hurricane Andrew, Ramon M. Riba, Michael H. Triche and Charles Hoover, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994),

Performance of Prestressed Concrete Roofs During Hurricane Andrew, Wimal Suaris and Mohammed S. Khan,

CF Feb. 94, p16-30.

Performance of Traffic Signals and Signs in Hurricane Andrew, Frances K. Ashley, Ronald A. Cook and Marc I. Hoit, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p415-423.

A Probabilistic Approach to the Response of Tall Build-ings to Wind Loadings, Morteza A. M. Torkamani and Ramadan S. Murad, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1439-1444.

Proposed Hurricane Wind Speeds for ASCE 7-95, Jon A. Peterka and Kishor Mehta, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p461-466.

Seismic Behavior of Non-Ductile Concrete Frame Structures, Yahya C. Kurama, Stephen P. Pessiki, Richard Sause and Shaojie Wu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1496-1501.

Some Lessons from Australian Experience, George R. Walker, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p249-258.

Surface Pressures on the Roof of the Texas Tech Experimental Building: Model and Full-Scale, Henry W. Tiele-man, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1445-1450.

Teaching Structural Loading: A Case Study, R. Panneer Selvam, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1375-1378

TV Tower Designed for Winds Up to 145 mph, CE Apr.

94, p107. US Hurricanes of 1992 an Australian Perspective, Greg Reardon and Doug Meecham, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p642-651.

Wind Action on Highrise Structures: Codes - Wind Tunnel Reality, Nicholas Isyumov, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p430-445.

Wind Loads on Low Rise Structures: A Survey, B. L. Sill and T. A. Reinhold, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1030-1035.

Wind Loads on Roofs of Low Rise Structures: Buffeting or Interaction, Henry W. Tieleman, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994),

Wind Resistance of Conventional Light-Frame Buildings, Ronald W. Wolfe, Ramon M. Riba and Mike Triche, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad So-

tani, ed., 1994), p652-662.

Wind Tunnel Testing of High-Rise Residential Buildings in Hurricane Areas, Peter A. Irwin, Mark A. Hunter, Mark Mosbat and Sanjeev M. Shah, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p663-673.

Wind-Induced Nonlinear Lateral-Torsional Buckling of Cable-Stayed Bridges, Virote Boonyapinyo, Hitoshi Yamada and Toshio Miyata, ST Feb. 94, p486-506.

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Codification of Wind-Pressure Coefficients for Multispan Gable Roofs, Theodore Stathopoulos and Patrick Saathoff, ST Aug. 94, p2495-2519.

Effectiveness of Storm Shutters in Hurricane Damage Prevention, Raja R. A. Issa, Camille A. Issa, Ajay Shanker and Paul Gencorelli, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p486-495. Hurricane Andrew - The Ultimate Curtain Wall Test, James Hayes Larkin, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p424-429.

Prestressed Concrete Failures Due to Uplift, Wimal Suaris, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1433-1438.

Study of Interaction Between Pneumatic Spherical and Cy-lindrical Form Shells Subjected to Wind Pressure, D. Beilin and V. Polyakov, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1082-1093.

Wind Loads on Low Rise Structures: A Survey, B. L. Sill and T. A. Reinhold, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1030-1035.

Wind Loads on Roofs of Low Rise Structures: Buffeting or Interaction, Henry W. Tieleman, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p350-361.

Wind speed

Averaging Time and Maximum Speeds in Hurricanes, Naveen Aerrabotu and Timothy A. Reinhold, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p467-472.

The Determination of Typhoon Design Wave By Synthetic Probibility Method, Nai Kuang Liang and Hai Kuan Peng, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p1040-1047.

Extreme Winds Estimation by 'Peaks Over Threshold' and Epochal Methods, J. L. Gross, N. A. Heckert, J. A. Lechner and E. Simiu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1472-1477.

Field Experiments for Wind Effects on Low Buildings, Kishor C. Mehta, Douglas A. Smith and Byron B. Yeatts, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1451-1456.

Gust Speeds in Hurricanes, R. D. Marshall, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p1457-1462

Hurricane Windspeeds at Inland Locations, P. J. Vickery and L. A. Twisdale, (Structures Congress XII, N. C Baker, ed. and Barry J. Loodno, ed., 1994), p473-478.

Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani,

ed., 1994, 0-7844-0046-6, 808pp.

Improved Computer Simulation of 3D Wind Flow Around a Building, Y. S. Zhou and T. Stathopoulos, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p88-91.

Modeling of Extreme Loading by 'Peaks Over Threshold' Methods, J. L. Gross, N. A. Heckert, J. A. Lechner and E. Simiu, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p135-147

On Hurricane-Generated Seas, Michel K. Ochi, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p374-387

Overview of Hurricane Iniki, Arthur N. L. Chiu, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p92-101.

Performance of Spun Prestressed Concrete Poles During Hurricane Andrew, Fouad H. Fouad, Norman L. Scott, Elizabeth Calvert and Michael Donovan, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p362-376.

Predicting Wave Spectra With a Third Generation Spectral Wave Model, Charles L. Vincent, Ph.D., Robert E. Jensen, Ph.D. and Hans C. Graber, Ph.D., (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p420-432.

A Probabilistic Approach to the Response of Tall Buildings to Wind Loadings, Morteza A. M. Torkamani and Ramadan S. Murad, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1439-1444. Probability of Severe Hurricanes Across the Gulf of Mexico, L. E. Chouinard and Chang Liu, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p696-705.

Proposed Hurricane Wind Speeds for ASCE 7-95, Jon A. Peterka and Kishor Mehta, (Structures Congress XII, N. Baker, ed. and Barry J. Loodno, ed., 1994), p461-

Relationship Between Residential Insurance Losses and Wind Conditions in Hurricane Andrew, Peter R. Sparks and Shiraj A. Bhinderwala, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p111-124.

Standardizing Wind Measurements for Documentation of Surface Wind Fields in Hurricane Andrew, Mark D. Powell, Samuel H. Houston and Timothy A. Reinhold, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p52-69.

TV Tower Designed for Winds Up to 145 mph, CE Apr.

94, p107.

Uncertainties in the Prediction of Hurricane Windspeeds, L. A. Twisdale, P. J. Vickery and M. B. Hardy, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p706-715.

Wind tunnel models

Surface Pressures on the Roof of the Texas Tech Experimental Building: Model and Full-Scale, Henry W. Tieleman, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1445-1450.

Wind tunnel test

Codification of Wind-Pressure Coefficients for Multispan Gable Roofs, Theodore Stathopoulos and Patrick Saathoff, ST Aug. 94, p2495-2519.

A Computer-Controlled, Precision Pressure Standard, Othon K. Rediniotis, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p509-518.

Construction of the Baytown Bridge, Houston, Man-Chung Tang, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p666-671.

Enter the Dragon, Scott Danielson, CE Nov. 94, p64-67. Identification of Aeroelastic Parameters of Flexible Bridg-es, Partha P. Sarkar, Nicholas P. Jones and Robert H.

Scanlan, EM Aug. 94, p1718-1742.

Improved Computer Simulation of 3D Wind Flow Around a Building, Y. S. Zhou and T. Stathopoulos, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994),

p88-91

Performance of Offshore Platforms in Hurricane Andrew, Ahsan Kareem and Charles E. Smith, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994),

Roof Space Frame Design of the C.K.S. Airport Passenger Terminal II, Yen-Po Chen and Hung-Tao Chao, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994),

p57-66.

Semianalytical Method for Parametric Study of Tuned Mass Dampers, Y. L. Xu and K. C. S. Kwok, ST Mar. 94, p747-764

Study of Interaction Between Pneumatic Spherical and Cylindrical Form Shells Subjected to Wind Pressure, D. Beilin and V. Polyakov, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1082-1093

Wind Effects and Countermeasures During Erection of a Cable-stayed Bridge, S. G. Arzoumanidis, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), p881-886.

Wind Loads on Low Rise Structures: A Survey, B. L. Sill and T. A. Reinhold, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1030-1035.

Wind Studies of the Owensboro Bridge, Kentucky, P. A. Irwin, V. Chandra, J. Xie and G. K. Stone, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p887-893.

Wind Tunnel Testing of High-Rise Residential Buildings in Hurricane Areas, Peter A. Irwin, Mark A. Hunter, Mark Mosbat and Sanjeev M. Shah, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p663-673.

Wind tunnels

Wind Action on Highrise Structures: Codes - Wind Tunnel - Reality, Nicholas Isyumov, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p430-445.

Wind velocity

Estimation of V_{0max}, and Identification of the Iniki Overwash Line on Kaua'i, C. H. Fletcher, T. A. Schroeder, G. M. Barnes, B. M. Richmond and M. A. Hampton, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p746-755.

Finite Element-Based Flutter Analysis of Cable-Suspended Bridges, Ahmad Namini, Pedro Albrecht and Harold

Bosch, ST June 92, p1509-1526.

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Wind waves
Field Performance and Analysis of Steep Riprap, Guy
Lefebvre, Karol Rohan, Mahrez Ben Belfadhel and
Oscar Dascal, GT Sept. 92, p1431-1448.
Hurricane Iniki, A Hindcast, Winds, Windwaves, Swells,
Storm Surge, and Wave Run-Up, C. L. Bretschneider, J.
D. Agrawal, N. C. Carmella and K. A. Wohlmut, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p772-781.

Modeling Bottom Friction in Wind-Wave Models, Hendrik L. Tolman, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed.,

1994), p769-783.

Nonlinear Effects on Wave Envelope and Phase, M. Aziz Tayfun, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p755-768.

Observations of Wind Wave Growth by ERS-1 SAR, Chich Y. Peng and Antony K. Liu, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Mi-

chael Hemsley, ed., 1994), p934-942.
The Re-derivation of the NDBC Wind-Wave Algorithm, Ian M. Palao and David B. Gilhousen, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and

J. Michael Hemsley, ed., 1994), p569-575.

Sediment Transport by Wind Waves, Long Waves and Mean Currents: An Experiment on Nearshore Morphodynamics, Lake Huron, Canada, Troels Aagaard and Brian Greenwood, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p14-28.

Spectral and Parametric Wave Models of Lake Erie, David J. Welsh and Keith W. Bedford, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p217-221.

Windbreaks

Effect of Saline Irrigation Water on Tree Growth, Ghulam Hussain and Otto J. Helweg, IR Sept./Oct. 94, p970-978.

Edge Strength of Window Glass by Mechanical Test, Chris P. Pantelides, Gregory P. Sallee and Joseph E. Minor,

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Strength of New Heat Treated Window Glass Lites and Laminated Glass Units, H. Scott Norville, Paul M. Bove, Darrel L. Sheridan and Stacey L. Lawrence, ST Mar. 93, p891-901.

Windows

Effectiveness of Storm Shutters in Hurricane Damage Prevention, Raja R. A. Issa, Camille A. Issa, Ajay Shanker and Paul Gencorelli, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p486-495. Improving the Performance of Architectrual Glazing in

Hurricanes, Joseph E. Minor and Richard A. Behr, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p476-485.

Integrating Computer Application for Pavement Management: A Case Study, Dimitri A. Grivas, B. Carneron Schultz and Richard Garrabrant, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1951-

An Object Oriented Highway Information System in the Client-Server Environment, Kelvin C. P. Wang and John P. Zaniewski, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1959-1966.

Relationship Between Residential Insurance Losses and Wind Conditions in Hurricane Andrew, Peter R. Sparks and Shiraj A. Bhinderwala, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p111-124.

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"Dynamic Compaction Used as a Winter Construction Expedient", Lawrence F. Johnsen and Christopher Tonzi, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p68-79.

Wire products
Bond Strength of Welded Wire Fabric in Concrete Bridge Bonu strength of wetered wire rabric in Concrete Bridge Decks, Bilal M. Ayyub, Naji Al-Mutairi and Peter Chang, ST Aug. 94, p2520-2531. Splicing Strength of Welded Steel Mesh in Concrete Bridge Decks, Bilal M. Ayyub, Naji Al-Mutairi and Peter Chang, ST Aug. 94, p2532-2546.

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Using Hydrophones to Monitor Prestressed Concrete Pipe Osing Hydrofinies to Molinier Festiesse. Confrete Pro-for Reinforcing Wire Failures, Douglas J. Buchanan, Malin L. Jacobs and Fred A. Travers, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p212-225.
Welded Wire Fabric for Bridges II.: Fatigue Strength, Bi-

lal M. Ayyub, Peter C. Chang and Naji A. Al-Mutairi, ST June 94, p1882-1892.

Welded Wire Fabric for Bridges. I: Ultimate Strength and Ductility, Bilal M. Ayyub, Peter C. Chang and Naji A. Al-Mutairi, ST June 94, p1866-1881.

Cryptosporidium and the Milwaukee Incident, Kim R. Fox and Darren A. Lytle, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p50-57.

Harbor and Marina Improvements McKinley Marina Mil-waukee, Wisconsin, Greg High and Dave Werren, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p489-498. Rails Consolidated, Much to Homeowners' Delight, CE

Apr. 94, p19.

Waterfront Renaissance Racine, Wisconsin, Thomas N. Wright, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p544-551.

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Women Engineers: Why So Few? National Academy of Sciences, ME Sept./Oct. 94, p20-23.

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Manufactured Housing, Steve G. Winistorfer and Law-rence A. Soltis, ST Dec. 94, p3577-3594.

Low Strain Dynamic Testing of Wood Piles Supporting an Existing Pier, Mohamad Hussein, William Wright and Billy Edge, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p940-945.

Simulation of Correlated Nonstationary Lumber Properties, Frank Lam, Yin-Tang Wang and J. D. Barrett, MT Feb.

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Special Considerations in the Design of Connections for Recycled Wood/Plastic Composite Lumber, George H. Kyanka, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p929-933.

Wood Fiber Reinforced Cement Composites Under Wetting-Drying and Freezing-Thawing Cycles, Parviz Soroushian, Shashidhara Marikunte and Jong-Pil Won, MT Nov. 94, p595-611.

Vood beams

Analysis of Glulam-FRP Beams by a Layer-Wise Formulation, Julio F. Davalos, Youngchan Kim and Somnath S. Sonti, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p67-75.

Nonlinear Analysis of Two-Layered Wood Members with Interlayer Slip, Dan L. Wheat and Jose M. Calixto, ST June 94, p1909-1929.

Evaluation of Wood Floor Vibration Design Criteria, R. E. Kalkert and J. D. Dolan, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p520-525.

Time-Dependent Load-Distribution Behavior of Parallel-Member Wood Systems, P. Hong, K. J. Fridley and D. V. Rosowsky, (Structures Congress XII. N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1088-1093.

Wood poles

Application of Nondestructive Evaluation to Wood Poles, Ronald W. Anthony and Jozsef Bodig, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p669-676.

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Research and Development — Why bother? Robert J. Tichy, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p683-688

A Self-Balancing Laminate, Jozsef Bodig, Robert T. Brooks and Allan G. Burk, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p689-694

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Timber Pile Length Determination Using a Nondestructive Technique, Robert T. Brooks and Allan G. Burk, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p952-957.

Wooden structures

Buckling Strength of Wood Power Poles Using Finite Elements, A. B. Peabody and J. W. Wekezer, ST June 94, p1893-1908.

The Canadian Approach in the Design of Wood Structures: Conversion to Limit States Design, Dominique P. Janssens, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p514-519.

Common Causes of Collapse of Metal-Plate-Connected Wood Roof Trusses, Harvey A. Kagan, CF Nov. 93,

p225-234.

Computer Analysis of Lateral Loading in Wood-Framed Structures, R. Williams, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1513-1515.

Design and Construction of the Cable-Stayed Wooden Space Truss Roof, Kei Sadakata and Hong Wan, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p810-819.

The Effect of Composite Reinforcement on Structural Wood, Beckry Abdel-Magid, Habib J. Dagher and Tod Kimball, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p417-424.

Evaluation of Wood Floor Vibration Design Criteria, R. E. Kalkert and J. D. Dolan, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p520-525.

Experimental Study on a Buckling Behavior of a Wooden Single-Layer Space Frame of Reticular Shell on a Hexagonal Plan: Influence due to the Bolted Joint Looseness with Axial and Bending Resistance, Kouichi Matsuno and Shigeru Aoki, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p152-161.
Failures and Failure Mechanisms for Exterior Walls, Gene

S. Sanders, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and

Mehrdad Sotani, ed., 1994), p509-518.

Harmonization of Reliability-Based Timber Engineering Codes and Standards, Ronald W. Anthony and Jozsef Bodig, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p503-507.

Hurricane Andrew - Structural Performance of Buildings in South Florida, Edward L. Keith and John D. Rose, CF

Aug. 94, p178-191.

Improvements to Residential Construction on Kauai After Iniki, Ken K. Hayashida and Dennis K. Hanatani, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p617-625.

In Rehab We Trust, Benjamin Lavon, CE Sept. 94, p73-74. Load Duration Effects in an 85-Year-Old Timber Structure, J. B. Mitchell, K. J. Fridley, M. O. Hunt and J. F. Senft, (Structures Congress XII, N. C. Baker, ed. and Barry J.

Loodno, ed., 1994), p73-78.

LRFD vs. ASD for Wood Structures, David G. Pollock and Thomas G. Williamson, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p76-85.

New Guidelines for Southern Pine Uses in Coastal Marine Construction, Jon Guerry Taylor, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred

A. Klancnik, ed., 1994), p480-488.

Nondestructive Evaluation of Wood, Robert J. Ross and Roy F. Pellerin, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1233-1241

Nonlinear Finite-Element Model for Light-Frame Stud Walls, B. Kasal and R. J. Leichti, ST Nov. 92, p3122-

Nonlinear Finite-Element Model of Complete Light-Frame Wood Structures, Bohumil Kasal, Robert J. Leichti and Rafik Y. Itani, ST Jan. 94, p100-119.

Performance of Metal-Plate-Connected Wood Truss Roof Systems During Hurricane Andrew, Ramon M. Riba, Michael H. Triche and Charles Hoover, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994),

Performance of Plywood and OSB Sheathing During Hurricanes Andrew and Iniki, Edward L. Keith, (Hurricanes of 1992: Lessons Learned and Implications for the Fu-ture, Ronald A. Cook, ed. and Mehrdad Sotani, ed.,

1994), p313-329.

Performance of Wood-Framed Structures in the January 17, 1994, Northridge Earthquake, David J. Akers, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p662-668.

Proposed Test Method for Determining Bending Yield Moment of Nails, John H. Showalter, Jr. and David G. Pollock, Jr., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p918-922.

Simulation of Correlated Nonstationary Lumber Properties, Frank Lam, Yin-Tang Wang and J. D. Barrett, MT Feb.

94, p34-53.

Soil Nailing Saves Distressed Timber Wall, James Harmston and Gary W. Rhodes, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p130-136

Strength Variability of Wood Formwork Members, Saeed Karshenas, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p526-531.

Strength-Ratio Based Assessment of Wood Structures, Jozsef Bodig and Loren D. Flick, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p677-684.

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Evaluating ATIS Impacts on Air Quality, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), with R. Wayson and A. E. Radwan, p95-117

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Sintering Bricks on the Moon, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with John C. Graf and David S. McKay, p.1220-1229
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Allen, Richard K. Dispute Avoidance and Resolution for Consulting Engineers, 1993, 0-87262-903-1, 85pp.

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Pressure-Time Flow Rate in Low Head Hydro Plants, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), with David B. Hansen, Gerald A. Schohl and Patrick A. March, p445-453

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Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p589-594

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The Influence of Boundary Conditions on Beach Zonation, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed., and Nicholas C. Kraus, ed., 1994), with Federico Vilas, p417-431

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How Do Geosynthetics Improve Pavement's Performance, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Thomas L. Brandon, Timothy E. Smith and Bruce A. Lacina, p606-616

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Dynamic Interaction of Bridge and Moving Loading, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), with A. Fafitis, p77-93

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Heat Transfer Modeling in Burial Sites Containing Heat-Generating Waste, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Iqbal Ahmed and Paul Dickman, p899-906

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A High Level and Real Time Integration Approach for CAD Systems, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1779-1786

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An Artificial Neural Network Approach to Allocating Construction Resources, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with David Y. Chang, p950-957

An Artificial Neural Network Approach to Pavement Maintenance Decision Support System, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Essam Sharaf, p942-949

A Goal Driven Approach to Discrete Event Simulation, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with David Y. Chang, p515-522

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Prediction of Settlement for Five Footings, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), with Bengt H. Fellenius, p206-209

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Dam Safety Issues Related to Urban Detention Ponds, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p714-717

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Collapse Mechanism of Compacted Clayey and Silty Sands, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Felio, ed., 1994), with C. L. Ho and R. J. Fragaszy, p1435-1446

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Experimental Study of the Settlement of Shallow Foundations, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with François Baguelin, Yves Canépa and Roger Frank, p1602-1610

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The Scottsdale Water Campus: There's Nothing Like It, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Brad Hemken, Gary G. Small and Leonard Dueker, p665-66

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A 2D numerical simulation of the Po river delta flow, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), with S. Corti, V. Pennati and F. Saleri, p18-29

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Multicriteria Optimization in Engineering Design, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p318-325

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American Society of Civil Engineers, Publications Divi-

ASCE Annual Combined Index - 1993, ISSN: 0742-1753, 1994, 0-87262-851-5, 1055pp.

American Society of Civil Engineers

Minimum Design Loads for Buildings and Other Structures (ASCE 7-93), Revision of ANSI/ASCE 7-88 (St No. 93-007), 1994, 0-87262-904-X, 135pp.

Standard for the Structural Design of Composite Slabs (ANSI/ASCE 3-91) Standard Practice for Construction and Inspection of Composite Slabs (ANSI/ASCE 9-91) (St No. 91-003, 91-009), 1994, 0-87262-954-6, 90pp.

Standard Guidelines for the Design of Urban Subsurface Drainage (ANSI/ASCE 12-92) Standard Guidelines for Installation of Urban Subsurface Drainage (ASCE 13-93) Standard Guidelines for Operation and Maintenance of Urban Subsurface Drainage (ASCE 14-93) (St No. 92-012, 93-013, 93-014), 1994, 0-87262-996-1, 60pp.

Standard Practice for Direct Design of Buried Precast Concrete Pipe Using Standard Installations (SIDD) (St No. 93-015), 1994, 0-87262-995-3, 50pp.

American Society of Civil Engineers, (Publications Division, chmn.)

Transactions of the American Society of Civil Engineers - 1993, 1994, 0-87262-828-0, 760pp.

Ames, Bruce N.

Does Current Cancer "Risk Assessment" Harm Health?, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p121-122

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Coping with EPA's Transportation Storm Water Permit,
(Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1219-1223

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Geographical Information Systems and Remote Sensing: a possible support in 2D modelling of flood propagation, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), with P. P. Congiatu, A. Di Filippo and P. Molinaro, p143-155

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Multimedia Technology and Structural Steel Design, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p315-320

SteelDEM: An Interactive Multimedia Intelligent Tutor and Teaching Aid for Structural Steel Design, (Comput-ing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1458-1464

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disc. (of Design of Socketed Drilled Shafts in Limestone, by M. C. McVay, F. C. Townsend and R. C. Williams, GT Oct. 92, p1626-1637), GT Feb. 94, p460-461

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A Statistical Analysis of Wind Damage to Single-Family Dwellings Due to Hurricane Hugo, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994),

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Anand, Subhash C.

Accurate Estimation of Interface Shear Stresses in Composite Masonry Walls, with M. Ayubur Rahman, ST Mar. 94, p998-1015

Computing in Analysis and Design in Structural Engineering Education, Practice and Registration - A Rationale for Dialogue, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p357-361

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Ananda, Malwane M. A.

Alternative Approaches to Reliability Modeling of a Multiple Engineered Barrier System, (High Level Radioactive gram Committee, 1994), with Ashok K. Singh, p1030-Waste Management, High Level Radioactive Waste Pro-

Anandarajah, A.

Discrete-Element Method for Simulating Behavior of Cohesive Soil, GT Sept. 94, p1593-1613

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Monitoring Petroleum Contamination in an Aquifer, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Joseph C. Cataldo, p272-276

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Reinforced-Concrete Dimensioning Based on Element Nodal Forces, with Z. Despot, P. Steffen and S. M. R. Tabatabai, ST June 94, p1718-1731

Anderson, C. A.

see Mussetter, R. A., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p425-428

Anderson, Charles F., Jr.

Raw Water Cement-Mortar Lined Pipeline Corrosion A Case Study, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p372-386

Anderson, D. R.

The Assessment of Future Human Actions at Radioactive RASSESSIER OF THE TRAINER AND A RADIOACHY WASTE DISPOSAL SITES: An International Perspective, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with D. A. Galson and E. S. Patera, p1286-1291

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Model for Treatment of Trichloroethylene by Methano-trophic Biofilms, with Perry L. McCarty, EE Mar./Apr. 94, p379-400

Anderson, Jamie D.

Modeling Temperature Impacts on Salmon Survival, (Water Policy and Management: Solving the Problems. Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Gerald T. Orlob, p323-326

Anderson, Jim V.

Is it Necessary to Compromise Engineering Ethics to Remain Competitive?, El Oct. 94, p379-383

Breakout Session 5C: Regional Modeling, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), with Richard Burkhart and Gus von Bodungen, p158-160

Anderson, Loren R.

Settlements of Highway Embankments on Soft Lacustrine Deposits, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with Casan L. Sampaco, Syed H. Gilani, Edward Keane and Loren Rausher, p376-397

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see Bates, P. D., (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p243-256

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A Look at the Superpave Level 1 Mix Design Process, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Robert B. McGennis,

Anderson, Robert

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Anderson, Stuart

Computer Automation and Project Organizational Impact: A Conceptual Model, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Suresh Ketha, p498-501

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Americans with Disabilities Act and Employment Practices in Construction, with Carolyn F. Morgan and Mukul in Construction, with Catolyn F. Morgan and Mukur Goel, El Oct. 94, p360-378 Improving Project Management of Design, with Richard L. Tucker, ME July/Aug. 94, p35-94 see Swiggum, Kevin E., CO Sept. 94, p649-666

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Structures, Richard J. Finno, ed., 1994), p24-42

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Anderton, Carly C., (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p64-74 see Freeman, Reed B., (Infrastructure: New Materials and

Methods of Repair, Kim D. Basham, ed., 1994), p685-692

Anderton, Steve

see Thamir, Falah, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2020-2029

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Andrés, Oscar A.

Comparison of Two different Models of a Shell Roof, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with Néstor F. Ortega and Carlos A. Schiratti, p320-329

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Reliability and Response Control of R/C Buildings, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with D. de Leon, p1593-1599

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Angammana, Keerthisiri S.

An Integrated Shell (ROSS3) for Transport Modeling, Visualization, and Data Management, (Hydraulic Engineer-ing '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Poojitha D. Yapa and Hung Tao Shen, p150-154

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Annandale, George W.

On the Erodibility of Rock and Other Earth Materials, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Hendrik A. D. Kirsten, p68-72

Anno, J.

Fitted Analytical Expressions Giving the Enrichment in U235 of a Fresh Fuel Equal to a Spent PWR Fuel, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p757-764

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Analysis of Arch Dams, ST May 93, p1516-1538 err: ST Aug. 94, p2563-2564

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Ultimate Depth of Scour Around Bridge Piers, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Alimul Qadar, p51-55

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Application of Nondestructive Evaluation to Wood Poles, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Jozsef Bodig, p669-676

Harmonization of Reliability-Based Timber Engineering Codes and Standards, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Jozsef Bodig, p503-507

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see Beloshapkova, Svetlana G., (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p910-923

disc. (of Self-Aerated Flows on Chutes and Spillways, by H. Chanson, HY Feb. 93, p220-243), HY June 94,

Anwar, Mohamed N.

see Fanos, Alfy M., (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p189-203

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see Cabezut-Boo, Octavio, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p312-316

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Apicella, Guy

East River Modeling of Water Quality for Multiple-Project Assessments, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), with Robert Norris, Johanna Newton, Walter Ewald and Angelika Formdran, p235-248

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A Theoretical Framework for Risk Assessment, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p82-88

Appleton, William S.

An Energy Based Model for Coastal Bays and Lakes, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), with William L. Wood and Yan-Sheng Chang, p565-577

Apte, Sudheer M.

Planning Intricate Robot Motions to Remove Natural Materials, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), with Irving J. Oppenheim, p106-114

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Robust EBS Design and Source-Term Analysis for the Partially Saturated Yucca Mountain Site, (High Level Radiooactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p485-490

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On "Solid" Golden Pond, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), with Dale L. Watson, p170-179

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Empirical Performance Comparison for Symbolic and Subsymbolic Learning Systems, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Adam Borkowski, Tomasz Dybala, Janusz Racz and Piotr Wojan, p1075-1082

Machine Learning of Design Rules: Methodology and Case Study, with Eric Bloedorn, Ryszard S. Michalski, Mohamad Mustafa and Janusz Wnek, CP July 94, p286-308

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The Nevada Statewide Radioactive Materials Transportation Plan, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p150-157

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Shear Failure of Concrete Beams Reinforced with Plates, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with A. D'Ambrisi and A. Di Tommaso, p123-130

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Load-Settlement Prediction of Footings on Steep Slopes, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with Emir J. Macari and Mark Gemperline, p.1385-1399

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Off-Gas Recycle for VOC Emission Control: Conceptual Model, with Jack L. Musterman, EE May/June 94, p573-587

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Settlement '94, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), with Avtar S. Vasu, Fred Agostino and Judith S. Doyle, p192-195

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see Pradhan, Murari Man, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p627-634

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Human Factors Design Considerations for Variable Message Freeway Signs, with Jonathan E. Upchurch, TE Mar./Apr. 94, p264-282

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see Borst, W. G., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p896-905

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Integrated Environmental Monitoring Dredging Projects in the Netherlands, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), with Andre Kok, p1370-1379

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Planning and Implementing a Management System for Utility Cuts in City Streets, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Prahlad D. Pant, Andrew Bodocsi and Ahmet E.

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Wind Effects and Countermeasures During Erection of a Cable-stayed Bridge, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p881-886

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Farakka Barrage - It's Impacts and Possible Mitigation, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Sufian A. Khondker, p120-124

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ASCE Committee on Employment Conditions of the Professional Practice Division

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ASCE Task Committee on Design Criteria for Composite Structures in Steel and Concrete

Guidelines for Design of Joints between Steel Beams and Reinforced Concrete Columns, ST Aug. 94, p2330-2357

ASCE-ACI Committee 441, Subcommittee on Biaxially Loaded Columns, (Hsu, C. T. T., chmn.) Recent Advances in Biaxially Loaded Columns, (Struc-

tures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p450-454

ASCE-ACI Committee 441-Concrete Columns, Sub-committee on Longitudinal Reinforcement Limits, (Furlong, Richard W., chmn.)

Rational Limits for Longitudinal Steel in Concrete Columns, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p438-443

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Intelligent Design and Remediation of Shallow Landfill Burial Systems, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Leonard J. Lane and Thomas E. Hakonson, p257-264

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Phased and Layered Sampling for Navy Dredging, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1436-1440

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Performance of Traffic Signals and Signs in Hurricane Andrew, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Solani, ed., 1994), with Ronald A. Cook and Marc I. Hoit, p415-423

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V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p487-491

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A Process-Oriented Planning and Control Model for Computer-Integrated Construction, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Leonhard E. Bernold, p1756-1763

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Extended Set Control of Concrete, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), with Hamid Farzam, p137-146

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Uncertain Reasoning in a Pavement Management System, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p326-332

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Extended Topology in Building Design Systems, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Wouter Rombouts, p1196-1203

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Federal Cleanups: Good News from Bad, CE Mar. 94, p48-51

Geotechnical Baseline Reports, CE Dec. 94, p56-57

Roiled Waters: Water Politics in the 1990s, CE July 94, n49-51

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Heat-Straightening Repair of Damaged Steel, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1194-1202

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Non-Point Pollution Loadings and their Impacts on Tennessee Valley Reservoirs, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with John A. Gordon, p1247-1251

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Sediment Remediation: An International Review, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), with Norman R. Francingues, Jr., p596-605

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Effect of Pier Geometry on Scour in Graded Gravels, (Hy-draulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Francisco Grandón, p73-77

Flow-Bed Interaction and Energy Loss in Torrents, (Hy-draulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Alejandro López, p687-691

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Welded Wire Fabric for Bridges. I: Ultimate Strength and Ductility, with Peter C. Chang and Naji A. Al-Mutairi, ST June 94, p1866-1881

Welded Wire Fabric for Bridges II.: Fatigue Strength, with Peter C. Chang and Naji A. Al-Mutairi, ST June 94, p1882-1892

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see Baker, Clyde N., Jr., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1650-1671

Azevedo, Luiz G.

Integration of Water Quantity and Quality Planning, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Timothy K. Gates and Darrell G. Fontane, p388-391

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Local Buckling by Complex Finite Strip Method Using Bubble Functions, with Mark Andrew Bradford, EM Jan. 94, p43-57

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Aziz, Nadim M.

A Predictive Hydrologic Model for Contaminant Leaching and Liner Effectiveness at Dredged Material Confined Disposal Facilities, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with Paul R. Schroeder and Tommy E. Myers, p1507-1516

see Totapally, Hara G. S., EY Dec. 94, p133-147

Aziz, Tarek

see Ghobarah, A., ST Sept. 94, p2697-2716

Azizinamini, A.

High-Strength Concrete Columns: State of the Knowledge, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with P. Paultre and M. Saatcioglu, p444-449

Old Concrete Slab Bridges. I: Experimental Investigation, with T. E. Boothby, Y. Shekar and G. Barnhill, ST Nov. 94, p3284-3304

Old Concrete Slab Bridges. II: Analysis, with Y. Shekar, T. E. Boothby and G. Barnhill, ST Nov. 94, p3305-3319

Azizinamini, Atorod

Rigid Beam-To-Column Connection Detail for Circular Composite Columns, (Structures Congress XII, N. C Baker, ed. and Barry J. Loodno, ed., 1994), with Y. Shekar, p1155-1160

Azuma, Kazuki

see Nagata, Satoshi, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p437-440

Baasiri, Muin M.

Hydraulic Transients in Two Acid Transfer Lines, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p129-151

see Burt, M., (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1075-1081

Babcock, Richard A.

Potential Economic Benefits of the Yucca Mountain Pro-ject, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p642-649

Babin, Jay

see Murphy, Tom, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1071-1080

see Rao, A. S. Prasada, ST Sept. 94, p2784-2792

Baca, Robert G.

see Park, James R., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1461-1468

Backer, David S.

Deicing Denver, with Don Smith and Craig E. Habben, CE July 94, p56-59

Backus, Faith F.

see Kotin, Allan D., (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p154-161

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see Pope, R. B., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1229-1236

Baer, Thomas A.

see Gallegos, David P., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1671-1681

Baetz, Brian W.

Creation of Landowner Compacts for Sustainable Community Development, UP Dec. 94, p174-182

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see Iyer, Srinivasa L., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p400-407

Bagtzoglou, Amyrossios C.

Stochastic Analysis of Unsaturated Flow and Transport With the Suflat Executive Numerical Code, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with M. Rashidul Islam and Michael Muller, p2669-2677

see Mohanty, Sitakanta, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2660-2668

Baguelin, François

see Amar, Samuel, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1602-1610

Bahaari, Mohammed R.
Modelling of Extended Endplate Bolted Connections, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Archibald N. Sherbourne, p731-736

see Sherbourne, Archibald N., ST Nov. 94, p3122-3136

Bahia, E.

see Redondo, J. M., (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p350-365

Bahia, H. U.

Bahia, H. U.
Effects of Crumb Rubber Type and Content on Performance Related Properties of Asphalt Binders, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with R. Davies, p449-466
Modification of Asphalt Binders: A Critical Evaluation Using the New SHRP Methods, (Infrastructure: New Materials of Repair (Infrastructure: New Materials)

Materials and Methods of Repair, Kim D. Basham, ed.,

1994), p859-879

Rheological Evaluation of Engineered Asphalt Binders, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with N. I. Kamel, p97-113

Bahney, Robert H., III
Thermal Response of the Waste Package/MPC and EBS, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Thomas W. Doering, p809-815

Bai, Yong

Knowledge-Based Expert System for Concrete Mix Design, with Serji N. Amirkhanian, CO June 94, p357-373

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Bailey, David S.

The Light at the End of the Sewer: How Interested Parties Negotiated a Consensus Solution to the Combined Sewer Overflow Problem, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p204-210

Bailey, Edmond I.

see Fehr, Gregory, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1048-1054

Bailey, Simon F.

Case-Based Preliminary Building Design, with Ian F. C.

Case-Based Preliminary Building Design, with fan F. C. Smith, CP Oct. 94, p454-468

see Schmitt, Gerhard, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p301-309

Bailey, Steve

Milwaukee County Parks' Brown Deer Golf Course Lands P. G. A. Tour Event: A Gem of a Golf Course is Polished to a New Brilliance, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p536-543

Bailey, William

see Emami, Flora, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1538-1542

Bailey, William R.

disc. (of Preliminary Sizing of Detention Reservoirs to Reduce Peak Discharges, by Bruce M. McEnroe, HY Nov. 92, p1540-1549), HY Mar. 94, p417-420

Sediment Modeling in the Rio Grande Conveyance Chan-nel, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Cassie C. Klumpp, p1151-1155

see Klumpp, Cassie C., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p702-706

Baird, William F.

see Edge, Billy L., (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p1024-1039

Bak, Grzegorz Discrete Modeling of Soil-Structure Interaction Under Dynamic Loading, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p873-876 Baka, J. E.

see Taylor, J., (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p93-111

How to Improve Control of Flow and Reduce Cavitation, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), with Michael T. Stift and Paul W. Johnson, p89-103

Bakeer, Reda M.

see Spigolon, S. Joseph, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p269-278

see Subramanian, Rajesh, (Computing in Civil Engineer-ing, Khalil Khozeimeh, ed., 1994), p644-651

Baker, Clyde N., Jr.
Settlement Analysis for 450 Meter Tall KLCC Towers, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with Ir. Tarique Azam and Len S. Joseph, p1650-1671

Baker, Earl J.

Beliefs about Hurricane Andrew, Construction, and Evacu-ation, (Hurricanes of 1992: Lessons Learned and Impli-cations for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p31-36

see Nazarian, S., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p508-

Baker, N. C.

Structures Congress XII, 2 vols., with Barry J. Loodno, ed., 1994, 0-87262-952-X, 1635pp.

Baker, Nelson C.

Adaptive Instructor Model for an Engineering ITS, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Chaisak Srisethanil, p1059-1066

Multimedia Implications to Structural Engineering, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), with Omar El Kordy, p37-46 see Vanegas, Jorge A., CE May 94, p71-73

Baker, William B., Jr.

Coal Ash and Dredged Material in Reef Construction, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with Richard F. Gorini, p664-672

Bakheet, Moataz

see Kangari, Roozbeh, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p216-219

Bakht, Baidar

Ultimate Load Test of Slab-on-Girder Bridge, with Leslie G. Jaeger, ST June 92, p1608-1624 disc: Naji Arwashan, ST Feb. 94, p670-671 see Mufti, Aftab A., ST June 93, p1761-1777

Bakker, K. J.

Design Relationship for Filters in Bed Protection, with H. J. Verheij and M. B. de Groot, HY Sept. 94, p1082-1088

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Balakrishnan, Mahalingam

An Investigation of Turbulence in Open Channel Flow via Three-component Laser Doppler Anemometry, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), with Clinton L. Dancey, p159-175

Balakrishnan, Purushothaman

see Pant, Prahlad D., TE May/June 94, p432-446

Balasubramaniam, A. S. see Indraratna, B., GT Feb. 94, p257-273

Balázs, András

Onboard Image Processing With Transputers, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with József Biró and Sándor Szalai, p1323-1332

Balch, A. H.

Applications of Multi-mode Imaging to Multiple Offset VSP Data, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Cemal Erdemir and Joseph P. Rousseau, p2797-2803

Baldauf, Steven

see Lin, Fwu-Ding (Kim), (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1975-1982

An Overview of the Analysis and Design Techniques Used on the Main Tunnels of the SSC, (Computing in Civil Engineering, Khall Khozeimeh, ed., 1994), p1967-1974 An Overview of Shotcrete Usage on the SSC, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p773-778

see Guan, Liqiu (Lichu), (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2006-2013

Baldor, Javier A.

Information, Global-Style, WP Spring 94, p26-30

Bales, Jerad D.

Salinity and Dissolved-Oxygen Dynamics in a Wind-Driven Estuary, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with R. G. Garrett, p1311-1315

see Robbins, Jeanne C., (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p105-118

see Ziegler, C. Kirk, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p447-460

Balghunaim, F. A.

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Ball, J. M.

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see Jiang, Z., (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p352-359

Ballard, Glenn

Redesigning Job Site Planning Systems, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Gregory Howell and Saied Kartam, p1564-1574

Ballard, Robert F., Jr.

Acoustic Impedance for Assessing Subbottom Conditions, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with Richard G. McGee, p249-258

Rallarini, R.

Analytical and Experimental Analyses of Fatigue Crack Propagation in Asphalt Concrete Overlays, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with G. C. Ferrante and J. L. Figueroa, p978-983

Ballerstein, Mark K.

see Manning, Michael E., (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p146-153

Ballinger, Craig A.

Specification Needs for FRP Composite Products, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p56-63

Balocki, James B.

Relationships between n-Day Flood Volumes for Infrequent Large Floods, with Stephen J. Burges, WR Nov./ Dec. 94, p794-818

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Parameter Estimation of Structures from Static Response.

II: Numerical Simulation Studies, with M. R. Banan and K. D. Hjelmstad, ST Nov. 94, p3259-3283

Parameter Estimation of Structures from Static Response. I: Computational Aspects, with M. R. Banan and K. D. Hjelmstad, ST Nov. 94, p3243-3258

see Banan, M. R., ST Nov. 94, p3259-3283

Banavalkar, P. V.

First Bank Place: A Composite Cruciform Spine, (Struc-tures Congress XII, N. C. Baker, ed. and Barry J. Lood-

no, ed., 1994), p134-139 One Ninety One Peachtree and NationsBank: Composite Additions to the Atlanta Skyline, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with J. P. Colaco, p170-175

Banerjee, Sunirmal

An Alternative Formulation of Volume-change Behavior of Soils, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with Kandiah Sribalaskandarajah, p652-662

Banerji, S. K.

see Sumrall, L. B., CR June 94, p35-46

Banerji, Shankha K.

see Surampalli, Rao Y., (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p694-701

Banjac, Vojislav

Hills, Charles R., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with A. Sharif Heger, p671-678

Radiological Characterization of Hanford HLW Tank Farm Core Samples, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with A. Sharif Heger, p1110-1116

Local Buckling of Pultruded FRP Beams: Theory and Experiment, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with M. Nadipelli, T. R. Gentry and J. S. Yin, p417-422

Bank, Lawrence C.

see Gentry, T. Russell, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p575-582

Banks, Don

The Dredging Research Program Technical Area 2 Material Properties Related to Navigation and Dredging, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1554-1561

Banks, Glynn E.

see Alexander, Michael P., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p857-864

Bannura, Ramzi K.

see Greenwood, David J., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p232-236

Banon, H.

Assessing Fitness for Purpose of Offshore Platforms. I: Analytical Methods and Inspections, with R. G. Bea, F. J. Bruen, C. A. Cornell, W. F. Krieger and D. A. Stewart, ST Dec. 94, p3595-3612

Assessing Fitness for Purpose of Offshore Platforms. II: Risk Management, Maintenance, and Repair, ST Dec. 94, p3613-3633

Banta, Larry

Automation Concepts for In-Situ Waste Containment, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), with David Martinelli, p448-456

Banthia, Nemkumar

Carbon and Steel Microfiber-Reinforced Cement-Based Composites for Thin Repairs, with Sylvie Dubeau, MT Feb. 94, p88-99

Steel-Fiber-Reinforced Wet-Mix Shotcrete: Comparisons with Cast Concrete, with Jean-François Trottier and Denis Beaupré, MT Aug. 94, p430-437

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Rehabbing for Remediation, with Robert Anderson, CE Mar. 94, p64-65

Bao, Yixing

New Methodology for Optimization of Freshwater Inflows to Estuaries, with Larry W. Mays, WR Mar./Apr. 94,

Optimization of Freshwater Inflows to Lavaca-Tres Palacios, Texas, Estuary, with Larry W. Mays, WR Mar./ Apr. 94, p218-236

Baptista, António M.

see Fortunato, Angré B., (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p323-335

Barai, S. V.

see Pandey, P. C., CF Nov. 94, p243-263

Barbero, Ever J.

Compression Strength of Pultruded FRP Materials, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with John Tomblin, p836-843 see Kim, Youngchan, EM May 94, p1160-1166

Barclay, Robert T.

see Herr, Kenneth A., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p955-962

Barco, A. L.

Budgeting for Facility Repair and Maintenance, ME July/ Aug. 94, p28-34

International Expansion, Ethics, and Prohibited Foreign Trade Practices, ME Sept./Oct. 94, p34-40

Barends, Frans B. J.

Following the Geotechnical Studies of the West-Breakwater at Sines; Hydro-Geotechnical Stability of Breakwaters, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), with Jack Hagenaar, p124-167

Barfuss, Steven L.

Unsteady Spillway Inlet Conditions at the Weatherford Water Supply Reservoir, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with J. Paul Tullis and Stuart R. Wilson, p558-

Barger, Gregory S.

Utilization of Waste Solvent Fuels in Cement Manufacturing, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p41-55

Bargur, Jona

see Michelsen, Ari M., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p641-644

Barkaszi, Stephen F., Jr.

see Dally, William R., (Coastal Dynamics '94, A. S .-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p263-277

Barkau, Robert L.

see Espey, William H., Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p175-181

Barkdoll, Brian

see Neary, Vincent, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1171-1175

see Wang, Yalin, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1060-1064

Barker, Ben C.

see Hu, Tsay-Hsin G., (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p453-462

see Kaidy, James T., (Engineering, Construction, and Op-erations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p433-452

Barker, Charles E.

see Grow, John A., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1298-1315

Barker, Darrell D.

When is Finite Element Analysis Appropriate?, with James Weeks, CC Mar. 94, p1,12-15

Barker, Thomas J.

see Knarr, C. Michael, CE June 94, p66-67

Barker, Walter R.

Implementation of Elastic Layered Theory for Design of Unbonded Overlays, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), with Jim W. Hall, Jr. and Carlos R. Gonzalez, p42-52

Barkhordary, Ahmad see Afshar, Abbas, WR Jan./Feb. 94, p36-47

Lunar Mining, (Engineering, Construction, and Opera-tions in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p811-814

Barksdale, Gordon G.

Bridge Scour During the 1993 Floods in the Upper Missis-sippi River Basin, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p21-25

Barnard, R. W.

Analyses of Releases Due to Drilling at the Potential Yucca Mountain Repository, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1292-1297

Barnes, G. M.

see Fletcher, C. H., (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p746-755

see Yu, S. L., (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p508-515

Barnes, Wilson C.

Critical Issues in Post Disaster Code Enforcement, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), with Jose D. Mitrani, p284-293

Barnhart, Terry R.

Current Trends in Waterpark Development, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p434-438

Design and Technological Opportunities at Waterparks: The Hyland Hills' Water World Experience, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p83-92

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see Azizinamini, A., ST Nov. 94, p3305-3319

see Dick, Raymond, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p259-268

Barr, Bill G.

see Dick, Raymond E., (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p414-422

Barr, Charles F.

Testing the Spatial Neutrality of the REMI Net Migration Equation, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Nasser Daneshvary, Thomas A. Perrigo and Dan S. Rickman, p40-47

Barr, G. E.

Constraining Local 3-D Models of the Saturated-Zone, Yucca Mountain, Nevada, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Sharon A. Shannon, p1814-1821

Barrenechea, Ricardo

Structure Modelization Using Expert Elements 'Neural Stiffness Method', (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Fabián Calcagno and Guillermo Gulli, p676-683

Barrett, Curtis B.

see Koren, Victor, (Water Policy and Management: Solv-ing the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p9-12

Barrett, J. D.

see Lam, Frank, MT Feb. 94, p34-53

Barrett, Pierre

Hydration of Aluminate Cements, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), with Danielle Bertrandie, p132-

Barry, Timothy

see Haimes, Yacov Y., (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p19-25

Barta, Alan F.

The Transport of Gravels in Boulder-Bed Streams, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Peter R. Wilcock and Conor C. C. Shea, p780-784

see Wilcock, Peter R., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p834-838

Bartels, Jules D.

see Lovelace, James T., (disc), CE May 94, p51-54

Barthelemy, Jean-Francois

see Carpenter, William C., CP July 94, p345-358

Bartholow, John M.

A Salmon Population Model for Evaluating Alternative Flow Regimes, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuv-el, ed., 1994), with Terry J. Waddle, p877-880

Bartlett, John W.

An International Approach to Radioactive Waste Management, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p26-29

Bartnik, Wojciech

Fluvial Hydraulics of Streams and Mountain Rivers with Mobile Bed, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Alicja Michalik, p767-771

Bartolini, Paolo

Evaluation of the Return Period of the September 1992 Flood in Genova, Italy, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Juan B. Valdés, p102-106

Parameter Regionalization of a Daily Baseflow Runoff Model, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Juan B. Valdés, p97-101

Representation of Spatial Variability of Rainfall in Aggre gated Rainfall-Runoff Models, with Juan B. Valdés, HY Oct. 94, p1199-1219

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see Kendall, David, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1527-1553

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The Waterfront Development Process, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), with Ronald E. Schults, p93-103

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An Inflatable Antenna for Space-Based Low-Frequency Radio Astronomy, (Engineering, Construction, and Op-Radio Astronomy, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with Shreekanth A. Mandayam and Jack O. Burns, p1390-1399

see Burns, Jack O., (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1400-1409

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Using A Risk-Based Relative Position Analysis to Initiate Water Conservation Measures, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Ron Harris, p810-

Nonlinear Reservoir Routing: Particular Analytical Solution, HY May 94, p624-632

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Infrastructure: New Materials and Methods of Repair, 1994, 0-7844-0063-6, 1252pp.

Basheer, Imad A.

Design of Clay Liner Permeability at Laboratory Scale Using Expert Systems, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Wissam A. Naouss and Lakshmi N. Reddi, p273-276

Use of Expert Systems in Selecting Equilibrium Isotherms of Organic Compound Adsorption on Activated Carbon, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Shrinath Kotdawala, p640-643

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Development of a Knowledge-Based System for Sanitary Landfill Design, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with E. I. Stentiford, p1257-1264

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The French Mediation Mission: Siting of Underground Research Laboratories, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p249-257

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The Stump - A New Dimension in Dredging, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p701-707

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Partnering in Small Packages, ME Nov./Dec. 94, p22-23

Results of Drip Tests of Sludge-Based and Actinide-Doped Glasses, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with E. C. Buck, p1088-1101

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Bates, P. D.

Computation of a flood event using a two dimensional finite element model and its comparison to field data, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), with M. G. Anderson and J.-M. Hervouet, p243-256

Bathala, Chenchayya T.

Impacts of Natural and Manmade Changes on the San Luis Rey River Environment, (Water Policy and Manage-ment: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with W. Jeffery Moncrief, p327-330

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At-A-Site Mountain River Flow Resistance Variation, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p682-686

Battjes, J. A.

Spectral Boussinesq Modelling of Breaking Waves, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), with Y. Eldeberky and Y. Won, p813-820

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SCADA System Controls Combined Sewer Overflow Reg-ulation System to Optimize Wastewater Collection, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p822-828

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The Control of Settlement Using Geogrids, (Vertical and Horizontal Deformations of Foundations and Embank-ments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p491-501

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Creation of Land Information System for Milwaukee County, Wisconsin, SU Nov. 94, p156-165

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Timing Analysis of a Multiprocessor Architecture for Ac-

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Safeguarding the Disposal of Canada's Used Nuclear Fuel, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with G. R. Simmons, p1782-1790

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Use of Low Density Polyethylene to Modify Asphalt Mixtures, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Glenn D. Carraux, p303-310

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Specification Contract Effects on Hydraulic Designs, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), with Leo Kinney, p152-158

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Dynamic Compaction: Two Case Histories Utilizing Innovative Techniques, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), with Andrew D. Walker, p55-67

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Fracture Size Effect: Review of Evidence for Concrete Structures, with Joško Ožbolt and Rolf Eligehausen, ST Aug. 94, p2377-2398

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see Foster, D. L., (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p712-726

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Breakout Session 2A: TCM Requirements - General, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), with Elizabeth Deakin, Christine Kirby and Joseph Pulaski, p140-141

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Anatomy of Best Estimate, HY June 94, p679-692 see Espey, William H., Jr., (Hydraulic Engineering '94,

George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p628-633

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see Dumas, Jean C., (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p80-89

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Asphalt-Rubber Hot Mix in Road Rehabilitation, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p319-326

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see López, A., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2284-2290

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Calculation of 2D Flood Propagation Using the Program Package Floodsim, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), with M. Nujic and A. J. Otto, p257-

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A Generalized Approach to the Local Stability of Stiffened Plates: Part I-Mathematical Formulation, (Structures Congress XII, N. C. Baker, ed. and Barry I. Loodon, ed., 1994), with Archibald Sherbourne, p1526-1531

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Bedford, Keith W.

The Great Lakes Forecasting System: An Overview, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with David J. Schwab, p197-201

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see Chu, Yi-Fei P., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p212-216

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see Podber, David P., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p222-226

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see Wai, Onyx W. H., (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p296-305

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Flood Propagatic.: on Mobile Beds under Mountainous Flow Conditions, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), with R. Faeh, p327-341

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"A New Way of Teaching Structural Engineering With the 'AN/EX' Mini-Laboratory", (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1571
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Application of the PCRSS Reservoir Simulation Model to the Salt River Project, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Yvonne Reinink, p295-298

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Study of Interaction Between Pneumatic Spherical and Cylindrical Form Shells Subjected to Wind Pressure, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with V. Polyakov, p1082-1093

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nalba, ed., 1994), p1075-1081

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The Role of Computer Graphics in Teleoperation, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), with Won-Soo Kim and Paul S. Schenker, p1-9

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Dynamic-Behavior Modeler for Material Handling in Construction, with Taylan Dal, CP July 94, p269-285

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Khalil Khozeimeh, ed., 1994), p1164-1171

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Waste Geologic Repository, (High Level Radioactive Waste Management, High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Kenneth R. Hooks, p1716-1721

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The Great Lakes Initiative: Dollars Down the Drain, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), with Fredric P. Andes, p110-120

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The San Gorgonio Pass Water Project, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Aladdin Shaikh and Stephen P. Stockton, p73-76

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Beloshapkova, Svetlana G.

Some Features of the Initial Stage of Sediment Motion in Water Flows, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with Alexander V. Beloshapkov and Sergey M. Antsyferov, p910-923

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Cleanup of a Coal Tar Deposit Using a Vacuum Clam, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with I. K. Hill and A. Z. Erzinclioglu, p991-1000

Underwater Cleanup of a Pool of Liquid Creosote, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with I. K. Hill, p961-970

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A Speed Prediction Model for New Zealand Highways, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Roger C. M. Dunn, p728-734

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Simulating Water Supply Systems of the Raritan Basin, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Marshall R. Taylor, Che-Hsun Wan and Daniel P. Loucks, p433-436

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Monitored Retrievable Storage/Multi-Purpose Canister Analysis: Simulation and Economics of Automation, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Joe B. Stringer, p363-369

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Behavior of Foundations Subjected to Large Ground Movements, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Eric C. Drumm and Guoming Lin, p49-54
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Extensive Comparison of Directional Wave Analysis Methods From Gauge Array Data, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p740-754

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The Interactive Process: A Formal Means to Improved Relations, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Com 1994), with A. C. Robison, Paul E. Seidler and Michelle D. Ulick, p56-62

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Considerations in 2-D Modeling of Hydraulically Steep Flow, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with R. L. Stockstill, p1285-1289

Strengths and Weaknesses of Shallow Water Equations in Steep Open Channel Flow, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1257-1262

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Impacts of the 1993 Flood on the Mississippi River in Illinois, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p613-617

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Behavior Prediction for Spread Footings on Sand, (Pre-dicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p245-248

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Hybrid Composite Beams: Analytical Modeling, (Infra-structure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with I. L. Al-Qadi, p178-190

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Field Evaluation of Concrete Pavement Joint Sealants in Utah, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Hosin Lee, Sherm Hopson and David Eixenberger, p147-154

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Bieniawski, Z. T.

A Comparative Study of U.S. and Russian High-Level Waste Repository Design Concepts, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), with E. V. Kuzmin, p515-522

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Mineral Admixtures: Reactions, Micro-Structure and Macro-Properties, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), with Hans Pietersen, p292-328

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Wind Deflection Probability Analysis, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p869-874

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High-Performance Concrete Incorporating Large Volumes of ASTM Class F Fly Ash, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), with V. M. Malhotra, p508-523

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Late Stage Damage in G30-500/PMR-15 Laminates, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with Anping Hong, Andrew Gyekenyesi and John Hemann, p316-325

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Water Resources Development in the 1990's: A New Process, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Lawrence H. Roth and Daniel D. Heagerty, p822-825

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Wave Measurement Near Reflective Structures, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with M. A. Davidson, G. N. Bullock and D. A. Huntley, p701-711

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The DUCK94 Nearshore Field Experiment, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with Edward B. Thornton, p815-821

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Quasi-Two Dimensional Modelling of Flood Routing in Rivers and Flood Plains by Means of Storage Cells, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), with M. Gómez and J. Dolz, p156-170

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see Lewis, James K., (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p422-431

see Signell, Richard P., (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p578-590

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see Vomvoris, S., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2616-2623

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Fish Entrainment and Strategies for Diversion, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Dennis J. McCauley and John E. Navarro, p447-451

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Exploratory Studies Facility Test Implementation and Integration with Construction and Design, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Ned Z. Elkins, Richard Kovach and Ronald D. Oliver, p1770-1773

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Performance of Nearshore Berm Disposal at Port Canaveral, Florida, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1182-1191

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A Self-Balancing Laminate, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Robert T. Brooks and Allan G. Burk, p689-694

Strength-Ratio Based Assessment of Wood Structures, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Loren D. Flick, p677-

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see Anthony, Ronald W., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p669-676

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see Arudi, Rajagopal S., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994),

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see Hobbs, Benjamin F., (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p295-316

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see Hoppel, Christopher P. R., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p191-198

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Computer Applications in Structural Analysis and Design, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with J. P. Lee, p462-465

Educating A Structural Engineer, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with J. P. Lee, p1352-1357

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Wind Forces on Industrial Facilities, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Hikmat E. Zerbe, p1036-1041 Bohlen, W. F.

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Practical Importance of Structural Features of Clinker Phases, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p616-617

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A Mobile System for the Remote Assembly of Planetary Structures, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p278-285

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A Knowledge-Based Computer System for Financial Wind Risk Management, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Surya K. Gunturi, p2191-2198

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The Fleets of San Francisco Crippled by Phony Science. (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p162-169

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Poslander, John E. J.F. Evaluating Concrete Mesoscale Properties Using Neural Networks, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Toshihiro Ebihara and Hiroshi Hikosaka, p475-482

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Nonlinear Collapse of Offshore Jacket Structures, (Structures Congress XII, N. C. Baker, ed. and Barry J. Lood-no, ed., 1994), with Colin J. Billington and J. Keith Ward, p19-24

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The Present State-of-the-Art of Immobilization of Hazardous Heavy Metals in Cement-Based Materials, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), with Shondeep L. Sarkar, p481-498

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Vessel Positioning, Survey Controls and Dredge Monitor-ing Systems, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), with Cary B. Cox, Barry W. McCleave and Monroe B. Savage, p28-37

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HEC River Analysis System (HEC-RAS), (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Gary Brunner and Mark Jensen, p376-380

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Lewis and Clark Rural Water System: A Regional Approach to Solving Domestic Water Supply Problems for a Tri-State Area, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p161-164

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Arizona Groundwater Management Alternatives, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p351-354

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Predictions of Shallow Foundation Behavior for Settlement 94, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p168-172

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Limit States Analysis of Masonry Arches, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p797-802

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Field Evaluation of the Sediment Transport Model 'Stream' with a Bank Erosion Component, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Mona S. Dashputre, p979-983

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Monitoring of Water Injection Dredging, Dredging Pollut-ed Sediment, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), with Joh. G. S. Pennekamp, H. Goossens, A. Mul-lié, P. Verpalen, T. Arts, P. F. van Dreumel and W. D. Rokosch, p896-905

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Potable Water Reclamation-A Practical Option to Traditional Sources, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Peter D. Binney and Glenn Hamilton, p702-705

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Plate and Frame Membrane Air Stripping, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with David A. Vaccari, p726-729

A Modern Electric Stepgauge for Accurate Wave and Tide Measurement, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), with John B. Leenhouts, p708-717

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Durability of Steel/Composites Bonds for Rehabilitation of Structural Components, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Steven H. McKnight, Stacy B. Shulley, Vistasp M. Karbhari and John W. Gillespie, Jr., p295-302

Induction Heating for Rehabilitation of Steel Structures Using Composites, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Erdal Karamuk, Roderic C. Don and John W. Gillespie, Jr., p287-294

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Activated Carbon as a Catalyst for Polymerization of Phenolic Compounds, (Critical Issues in Water and Waste-water Treatment, Joseph N. Ryan, ed. and Mare Ed-wards, ed., 1994), with Radisav D. Vidic, p756-763

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see Raper, David W., (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p193-210

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Database Use in the Engineering Office, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1874-1879

Software Interface in Engineering Applications, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1880-1883

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Breakout Session 3B: Traffic Projections and Uncertainties, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), with David Hartgen and Peter Stopher, p151

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Strong-Motion Data Processing, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with April M. Converse, p1600-1605

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Analysis of the Causes and Triggering Events of Disastrous Torrent Flood, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Zoran Gavrilović, p640-644

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Application and Benefits of Aquifer Recharge in Santa Fe, New Mexico, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Mark Fenton and Mike Slota, p21-24

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COAST Educational Program for Teaching Structural Analysis, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Jerzy W. Wekezer, p327-332

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Impact of Hurricane Andrew on Electrical Generating Facilities, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), with R. L. Adams and J. E.

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Plain flooding: near field and far field simulations, (Modelling of Flood Propagation Over Initially Dry Areas, Pao-lo Molinaro, ed. and Luigi Natale, ed., 1994), with F. Dadone and M. Gallati, p45-59

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Pink Sandverbena Recovery Efforts, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with Thomas Kaye, p1441-1450

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Depth-Averaged Flow Model in Curvilinear Coordinates, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p517-521

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Improving Reservoir System Operations Under Water Rights Requirements, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with W. Liu, G. N. Day, D. P. Laurine and R. Steger, p588-591

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Lightweight Concrete - A Proven Material for Two Millennia, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), with Thomas A. Holm and Valentina F. Stepanova, p37-51 see Selih, Jana, EM Oct. 94, p2028-2043

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Hurricane Iniki, A Hindcast, Winds, Windwaves, Swells, Storm Surge, and Wave Run-Up, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), with J. D. Agrawal, N. C. Carmella and K. A. Wohlmut, p772-781

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Environmental Effects of Flooding at a USCG Base, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with Michael J. Donnelly, p781-787

Breuer, James

Managerial Aspects of Information-Technology Strategies for A/E/C Firms, with Martin Fischer, ME July/Aug. 94, p52-59

Brewer, Dong

see Brown, Russ T., (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p492-500

Brewer, T. F.

Sensitized Photooxidation of Dissolved Sulfides in Water, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with J. Curtis, E. A. Marchand, V. D. Adams and E. J. Middlebrooks, p233-240

Briassoulis, Helen

Effectiveness of Water-Conservation Measures in Greater Athens Area, WR Nov./Dec. 94, p764-777

Load Settlement curve Method for Spread Footings of Sand, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with Philippe Jeanjean, p1774-1804

Predicted and Measured Behavior of Five Spread Footings on Sand, Geotechnical Special Publication No. 41, with Robert M. Gibbens, ed., 1994, 0-7844-0025-3, 230pp.

Test and Prediction Results for Five Large Spread Footings on Sand, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), with Robert Gibbens, p92-128

Test and Prediction Results for Five Spread Footings on Sand, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with Robert M. Gibbens, p1897-

see Bush, Randall K., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1011-1027

see Gibbens, Robert, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briand, ed. and Robert M. Gibbens, ed., 1994), p11-85

see Jeong, Sangseom, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1366-1384

see Maxwell, James C., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p143-152

Bridge, Russell Q.

see Clarke, Murray J., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1587-

Bridgewater, C.

Applications of Artificial Intelligence Techniques to Component-Based Modular Building Design, with B. L. Atkin, CP Oct. 94, p469-488

Briggs, Christopher T.

see Follette, John G., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1964-1970

Briggs, Michael J.

Experimental Study of Monochromatic Wave-Ebb Current Interaction, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), with Philip L. -F. Liu, p474-488

Bright, Donald G.

see Collin, James G., (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p43-56

Brignoli, Enrico

The Usefulness of Stone Columns to Reduce Settlements and Distortions - A Case History, (Vertical and Horizonand Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with Angelo Garassino and Pietro Renzo, p561-570

Brill, E. Downey, Jr. see Baugh, John W., Jr., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p310-317

Bringhurst, Alan R.

see Abbott, David G., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p320-330

Brissette, F. P.

Estimation of Wave Directional Spectra from Pitch-Roll Buoy Data, with I. K. Tsanis, WW Jan./Feb. 94, p93-115

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see Adkins, Dan F., MT May 93, p280-288

Brito, Ricardo A. L.

disc. (of Holistic Approach to Irrigation Management in Developing Countries, by Phillip Z. Kirpich, IR Mar./ Apr. 93, p323-333), IR Sept./Oct. 94, p994-995

Brizick, Dennis V.

Historical Considerations for New Jersey Viaduct, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p302-307

Brizola, Joao Otavio

The Inflation Equation, with Paul C. Dinsmore, WP Special issue 94, p41-44

Broadhead, Sean D.

see Osborne, Robert H., (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p335-349

Brock, David

see Matsumoto, Junji, WR Sept./Oct. 94, p693-714

Brock, Johnny

STRANDNET: A Top-Level Storage, TRANsportation & Disposal NETwork Systems Analysis Tool for Spent Nuclear Fuel Waste Management, High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Felix Godwin and Ray Mitchell, p1704-1711

Brockhaus, Robert

see Riley, Michael, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1517-1526

Brockway, R. Chris

see Connor, Keith R., CE Feb. 94, p40-43

Brocoum, S. J.

see Sareen, S. S., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1393-1396

Brøker, Ida

3-Dimensional Processes Along Sandy Beaches - Dimensions of a Coastal Facility, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with Hakeem Johnson, Erik Asp Hansen, Ann Skou, Peter Justesen and Rolf Deigaard, p103-113

Brooks, M. W.

see Irish, J. L., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p314-321

Brooks, Robert T.

Timber Pile Length Determination Using a Nondestructive Technique, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Allan G. Burk, p952-957

see Bodig, Jozsef, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p689-694

Brouwer, Henry

see Murphy, Tom, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1071-1080

Brown, Bobby J.

Using Drop Structures for Stream Gaging, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p21-26

Brown, Colin

see Castaneda, Duane, ST Dec. 94, p3506-3524

Brown, D. A.

see Everitt, R. A., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2092-2100

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see Teng, Chung-Chu, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p993-1007 Brown, E. R.

Comparison of Unconfined- and Confined-Creep Tests for Hot Mix Asphalt, with Kee Y. Foo, MT May 94, p307-326

see Buncher, Mark S., (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p53-63

Brown, H. B., Jr.

A Novel Gravity Compensation System for Space Robots, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), with J. M. Dolan, n250-258

Brown, James

see Hinze, Jimmie, CO Dec. 94, p816-827

Brown, James D.

see Halligan, David W., CO Mar. 94, p47-64

Brown, Jim

Partnering to Save Troubled Projects, ME May/June 94, p22-25

see Roberson, Gary D., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1731-1738

Brown, John Webster

disc. (of Roof-Snow Load for Seismic-Design Calculations, by Michael J. O'Rourke and Robert S. Speck, Jr., ST Sept. 92, p2338-2350), ST Jan. 94, p309-312

Brown, Johnine J.

Federal Permits for Marina Development: Controlling the Process, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p144-153

Brown, Kim A.

see Soldate, Albert Mills, Jr., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p103-110

Brown, Martin L.

Denver International Airport Tensile Roof Case Study: The Fabrication and Construction Process, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p969-978

Brown, Michael

see Field, Richard, EE Sept./Oct. 94, p1044-1066

Brown, Paul W.

Cement Manufacture and Use, 1994, 0-7844-0048-2, 324pp.

Brown, R. Michael

see Lee, Songjae, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1333-1344

Brown, Richard A.

see Wood, Edward A., CE Oct. 94, p50-53

Brown, Russ T.

Trihalomethanes in Chlorinated Sacramento-San Joaquin Delta Drinking Water Simulated with the EPA WTP-THM Model, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with Doug Brewer, Doug Owen and Zaid Chowdhury, p492-500

Brown, Russell T.

Modeling Pollutant Fate and Transport in Constructed Wetlands, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with Joanne Field, Michael J. Zanoli and Ron W. Crites, p532-539

Brown, Tim P.

Testing Conceptual Unsaturated Zone Flow Models for Yucca Mountain, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Linda L. Lehman and John L. Nieber, p1999-2006

Brown, William C.

The History and Present Status of Microwave Aircraft, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1482-1491

Brownell, Loretta F.

see Weaver, Wallace J., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p188-192

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see Greene, Brian H., CE Apr. 94, p48-50

see Banon, H., ST Dec. 94, p3595-3612

Brueneman, D. J.

see Gibson, M. A., (Engineering, Construction, and Opera-tions in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1167-1177

Bruggers, Donald E.

see Schmidt, James M., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1212-1219

Bruggink, Thomas H.

disc. (of Susceptibility of Reservoirs to Drought Using Palmer Index, by William K. Johnson and Roger W. Kohne, WR May/June 93, p367-387), WR Sept./Oct. 94, p736-738

Brugnot, Gerard

see Naaim, Mohamed, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p298-308

Brumley, Blair

see Tubman, Michael, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p86-95

Brummer, Charles G.

disc. (of Doubling A Pipeline, by Gary Walker and John Myrick, CE Jan. 94, p50-53), CE Apr. 94, p32

Bruneau, Michel

Cumulative Impact of Heavy Permit-Trucks on Steel Bridges, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Murat Dicleli, p97-102

Cyclic Testing of Pultruded Fiber-Reinforced Plastic Beam-Column Rigid Connection, with David Walker, ST Sept. 94, p2637-2652

State-of-the-Art Report on Seismic Performance of Unreinforced Masonry Buildings, ST Jan. 94, p230-251

Strategies to Enhance Well-Being of Civil Engineering Profession, El Oct. 94, p341-359

Field Measurements of Tensile Forces on a Spherical Dome Sector Caused by Internal Load of a Granular Product in Storage, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p172-179

see Bonner, Vernon, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p376-380

Brunner, Gary W.

Improved Hydraulic Features of the HEC River Analysis (HEC-RAS), (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Steven S. Piper, p502-506

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see Ahsan, A. K. M. Quamrul, HY Nov. 94, p1264-1273

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see Puri, Satinder P. S., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1022-1031

Brusey, Walter G.

see York, Donald L., GT Sept. 94, p1498-1513

Bruton, Carol J.

see Meike, Annemarie, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2590-2596

Bryan, Charles R.

see Ward, David B., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2048-2062

Brylawski, Ed

Settlement Measurements of 50-ft High Embankments at the Chesapeake & Delaware Canal Bridge, (Vertical and Horizontal Deformations of Foundations and Embank-ments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with Poh C. Chua and Edward S. O'Malley, p1149-1163

Bubbers, Geoffrey

Hypertext and Claim Analysis, with John Christian, CO Dec. 92, p716-730 disc: Roy Wilson and George Tlamsa, CO June 94,

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see Edinger, John Eric, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p536-550 see Edinger, John Eric, HY July 94, p886-890

Buchanan, Douglas J.

Using Hydrophones to Monitor Prestressed Concrete Pipe for Reinforcing Wire Failures, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), with Malin L. Jacobs and Fred A. Travers, p2.12-225

Buchanan, Ian

see Leduc, Roland, EE Mar./Apr. 93, p271-286

Bucholc, Jeffrey

see Ghafoori, Nadar, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1711-1718

Buck, E. C.

see Bates, J. K., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1088-1101

Buckle, Ian G.

Seismic Research Program for Highway Construction, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Ian M. Friedland, p373-379

Buckley, Robert L.

Numerical Studies of Radionuclide Migration in Layered Porous Media, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Sudarshan K. Loyalka and M. M. R. Williams, p1842-1847

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see Richards, R., Jr., GT Apr. 93, p662-674

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Instability of Sandbars in Grand Canyon, with Roger Gobin, HY Aug. 94, p919-933 HY Dec. 94, p1496 еп:

see Al-Karni, Awad, (Vertical and Horizontal Deforma-tions of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p748-759

Integrated Geology and Preliminary Cross Section Along the North Ramp of the Exploratory Studies Facility, Yucca Mountain, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with R. P. Dickerson, R. M. Drake and R. W. Spengler, p1055-1065

Buetow, Gerald W.

see Veshosky, David, ST July 94, p2123-2136

see Leidwanger, C., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1312-1324

Buggy, Fintan J.

Performance of Oil Storage Tanks on Vibroflotation Improved Hydraulic Fill in the Port of Tampa, Florida, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with Ramon E. Martinez, James D. Hussin and Richard J. Deschamps, p548-560

Bugliarello, George

Ideal of Civil Engineering, El July 94, p290-294

Bühler, J.

Simple Internal Waves and Bores, HY May 94, p638-645

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The Efficiency of Source Terms in Performance Assessments for Salt Repositories, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Jürgen Brenner and Richard Storck, p501-507

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see Harback, Herbert F., ME Jan./Feb. 94, p23-27

disc. (of International Information and Technology Transfer, by Charles G. Gunnerson, El Oct. 91, p336-350), El Jan. 94, p99-100

Bulkley, Jonathan W.

Federal Risk Management Policy: Where Is the Federal Government Heading? Where Are the Problems?, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p331-337

Risk Analysis: Wet Weather Flows in S.E. Michigan, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene

L. Stakhiv, ed., 1994), p89-101

Bullard, Daniel E.

Lunar Oxygen Production in a Hydrogen "Cold" Plasma, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with Peter E. Nolan and David C. Lynch, p1188-

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see Steinberg, Eric P., AS Apr. 94, p188-198

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Nuclear Arms Reduction, Nuclear Proliferation and High-Level Radioactive Waste Management, (High Level Ra-dioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with James M. Mc-Cormick, p30-39

Bullock, G. N.

see Bird, P. A. D., (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus,

ed., 1994), p701-711

see Crawford, A. R., (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p656-670

Bullock, Geoff N.

see Davidson, Mark A., (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p642-655

Bullock, Geoffrey N.

see Chadwick, Andrew J., (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p950-961

Bullock, William P., Jr. see Rogers, Jerry R., ed., Revenue Enhancement for Water and Wastewater Systems

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see Chucheepsakul, S., EM Sept. 94, p1848-1860

Buncher, Mark S.

The Use of Crumb Rubber Modifier in Hot-Mix Asphalt, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), with E. R. Brown, p53-63

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see Cheng, Ling, EE Jan./Feb. 94, p138-153

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disc. (of Holistic Approach to Irrigation Management in Developing Countries, by Phillip Z. Kirpich, IR Mar./ Apr. 93, p323-333), IR Sept./Oct. 94, p995-997

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Feasibility Study of Adaptive Control of Structures Under Seismic Excitation, with L. E. Suarez and C. R. Fuller, EM Mar. 94, p580-592

Buren, Mindy A.
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Management, High Level Radioactive Waste Program Committee, 1994), p1567-1572

Buresli, Naser K.

see Sarkani, Shahram, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p839-844

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Six Steps to Better Recruiting, ME Nov./Dec. 94, p14-16

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Burges, Stepnen J.
Confined Aquifer Parameters from a Pump Test Near an Impermeable Boundary, HY July 93, p838-845
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clo: HY Sept. 94, p1106-1107
see Balocki, James B., WR Nov /Dec. 94, p794-818

Burgess, Edward H.

CSO Rehabilitation Strategies for Urban Areas, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), with Larry A. Roesner, p184-193

Planning Model for Sewer System Rehabilitation, (Urban animing Moder for Sewer Systein Renabilitation, (1976). Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Commit-tee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p30-38

Burk, Allan G.

see Bodig, Jozsef, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p689-694 see Brooks, Robert T., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p952-957

Burkardt, Nina

Technical Understanding in Successful Environmental Negotiations, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Berton L. Lamb and Terry J. Waddle, p694-697

Burkhart, Richard

see Anderson, Jon, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p158-160

Burkholder, Earl F.

3-D Coordinates - A Universal Rectangular Coordinate System for a GIS and Other Spatial Databases, (Comput-ing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p233-240

Burleson, Daphne

Alternative Launch Systems Will They Replace the Shuttle?, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p472-577

Burli, Sandeep S.

see Parentela, Emelinda M., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1249-1254

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see Schladow, S. Geoffrey, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1321-1325

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see Oehlers, Deric J., ST Feb. 94, p378-393

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see Davis, Darryl W., (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p194-200

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see French, Jonathan A., CE Oct. 94, p42-45

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see Doe, S., (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p907-915

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Low Frequency Radio Astronomy from Earth or Lunar Orbit, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with John P. Basart and Bernard M. McCune, p1400-1409

see Basart, John P., (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1390-1399

see Duric, Nebojsa, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1382-1389

see Slane, Frederick A., (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p897-906

see Russell, Bruce W., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p618-

How to Optimize Light-Gage, Cold-Formed Steel Beams, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p104-112

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Depressing Traffic Top-Down, with Shyi-Shyong Jiang and Henrie Henson, CE Jan. 94, p62-64

Burroughs, Daniel K.

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see Chacho, Edward F., Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p785-789

I.P.L. Space Trusses: Structural Performance and Analysis, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with D. Shriftailig, V. Babaev, A. Bogdanov and D. Beilin, p1075-1081

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Beneficial uses of dredged material principles and practice, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), with Michael P. Dearnaley, p631-643

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see Rifer, Wayne, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p548-557

Assessing Stormwater Impacts, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1198-1202

Burton, W. Scott

Three-Dimensional Solutions for Thermomechanical Stresses in Sandwich Panels and Shells, with Ahmed K. Noor, EM Oct. 94, p2044-2071

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see Lin, W., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1938-1945

Buscheck, Thomas A.

Evaluation of Thermo-Hydrological Performance in Support of the Thermal Loading Systems Study, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with John J. Nitao and Steven F. Saterlie, p592-610

The Impact of Buoyant, Gas-Phase Flow and Heterogeneity on Thermo-Hydrological Behavior at Yucca Mountain, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994). with John J. Nitao, p2450-2474

see Paces, J. B., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2391-2401

Bush, Randall K.

Measured Downdrag on Seven Coated and Uncoated Piles in New Orleans, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with Jean-Louis Briaud, p1011-1027

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see Lovelace, James T., (disc), CE May 94, p51-54

Busse, David J.

The Engineer Vehicle Tele-operation Capability, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), with Joseph R. Urda, p474-480

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Butalla, M. W.

see Western, J. L., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p767-772

Butch, Gerard K.

Effects of Flow Duration on Local Scour at Bridge Piers in New York, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Richard Lumia, p46-50

Butcher, Donald P.

Bio-Remediation of Simulated Fire Training Facility, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), with Peter C. Gaskin, p127-136

A Space Station of Mars, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p787-792

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Fiber Optic Chemical Sensors on Mars, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with A. J. Ricco, F. J. Grunthaner and A. L. Lane, p1345-1354

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PWR Axial Burnup Profile Database, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with S. Van Volkinburg and L. A. Hassler, p739-743

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Effects of Spatial Triangulation on the Behavior of "Ten-segrity" Domes, (Spatial, Lattice and Tension Struc-tures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with David Chen, Paul A. Gossen and Kris P. Hamilton, p652-663

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Durability of Calcium Aluminate Cement Concretes, (Advances in Cement and Concrete, Michael W. Grutzeck. ed. and Shondeep L. Sarkar, ed., 1994), with C. M. George, p377-405

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Application of a Parametric Long Term Model Concept to the Delray Beach Nourishment Program, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with Huib J. De Vriend, Robert J. Nicholls and Marcel J. F. Stive, p391-401

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NDT Methods for Flaw Detection in Concrete, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p175-192

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Palaeohydraulic reconstruction of floods in upland UK bedrock streams: progress, problems and prospects, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p860-864

Particle Dynamics and Bed Level Adjustments in a Mountain Stream, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p839-

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Biofilm Sorption of Natural Organic Material, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with JoAnn Silverstein, p460-466

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Interactive Cost Estimating During Design, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Hyun-Soo Lee and Photios G. Ioannou, p1556-1563

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Earthquake Barrier Technology: Sliding-Friction Energy Dissipation, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1018-1023

Seismic Analysis of Failure and Loss of Function of Water Pumping Facilities, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with S. E. Hamburg, D. An and M. J. Cassaro, p1208-1213

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Biosphere II - Its Effects on Space Colonization, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p826-832

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Comparison of Predicted and Measured Settlement of a Test Embankment Over Soft Soil, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with William D. Kovacs and Ming-Jiun Wu, p1164-1175

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Development of an Expert System for Daily Drought Monitoring, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with H. Zheng and X. A. Kleopa, p630-639

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The Time Dependent Ray Method for Calculation of Wave Transformation on Water of Varying Depth and Current, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p671-

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Thresholds for Gravel and Cobble Motion, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p790-794

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NDE for Steel Bridges, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1203-

NDE for Steel Bridges: FHWA Research, Past, Present and Future, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1060-1064

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Environmental Technology Management of the Cement In-dustry in India and Neighbouring Countries, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p438-480

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Nonlinear Earthquake Analysis of Concrete Gravity Dams Including Sliding, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), with Gregory L. Fenves, p173-182

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The Role of Fracture Coatings on Water Imbibition Into Unsaturated Tuff, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Scott W. Tyler and John W. Fordham, p1891-1896

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Nonlinear Hydrodynamic Pressures on Arch Dam Faces, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Ing-Sen Yuan, p411-415

The Significance of Hydrodynamic Forces in Coastal Embankment Design, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p880-889

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Free-Surface Instability in Flow down Steep Rivers, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1264

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Stability Principle of Critical Flow Depth in a Moving Coordinate System, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1263

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Assessment of Distress Models for Prediction of Pavement Service Life, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Musharraf Zaman and Joakim G. Laguros, p1073-1080 see Zaman, Musharraf, TE Nov./Dec. 94, p967-988

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An Ultra-Lightweight Advanced Technology Telescope for Space Applications, Engineering, Construction, and Operations in Space IV. Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with R. J. Oliversen, H. Hojaji, W. K. Chu and T. L. Wilson, p1422-1430

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An Application of Inverse Problem Techniques to Spatial Typication on Inverse Frontial Techniques to Spanial, Structures, (Spanial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with Mamoru Kawaguchi and Masaru Abe, pl 13-122

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A Numerical Study of Hydraulic Jump and Mixing in a Stratified Channel With a Sill, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), with R. Grant Ingram and Jianping Gan, p119-133

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Study on the Sand Deposited Behind the Detached Break-waters, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with Ching-Ton Kuo, p938-949

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Prediction of Ground Deformations Due to Excavation-Application to Tunnel Lining Design in Weak Rock, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1997-2005

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Ultimate Loading Capacity of Braced Domes, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with N. Wang and S. Z. Shen, p539-546

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Seismic Analysis of Bridges: Simplified or Refined Approach, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p79-84

Roof Space Frame Design of the C.K.S. Airport Passenger Terminal II, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with Hung-Tao Chao, p57-66

An Approach to the Calculation Method of Mean Sediment Size, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Huilin Zhao, p805-809

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A Coupled GIS-Water Quality Modeling System, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with J. F. Atkinson and J. V. DePinto, p247-251

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Generalized Optimal Active Control with Embedded and Half-space Soil-Structure Interaction, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), with S. Suthiwong and P. Tian, p337-346

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Cheng, Franklin Y.

Analysis and Computation, 1994, 0-87262-974-0, 398pp. Stability Analysis of Optimal Active Control Systems with Time-Delay and Other Influence Parameters, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), with Peter Tian, p286-295

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Evaluating an Autoregressive Model for Stream Flow Forecasting, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1105-1109

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Morphology of Reciprocal Frame Three-Dimensional Grillage Structures, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with Ban Seng Choo and Jia Yu, p1065-1074

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A New Basic Principle for a New Series of Hydraulic Measurements. Erosion by Abrasion, Corrosion, Cavitation and Sediment Concentration, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p301-310

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Overview of Hurricane Iniki, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p92-101

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A Value Chain Model to Support Business Process Reengineering in Turnkey Contracting Firm, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1575-1582

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The BS8110 CAL Program for Teaching RC Design, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1663-1670

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Khozeimeh, ed., 1994), p704-711

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Statistical Quality Control and Assurance in Bituminous Materials, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with W. V. Ping, p1051-1058

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Structural Analysis of Pavements: State-of-the-Art, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p958-963

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GLFSVIEW - GLFS Product Viewing Application, (Hy-draulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Chieh-Cheng J. Yen and Keith W. Bedford, p207-211

Impact of GOES Data on Surface Heat Flux Predictions, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Keith W. Bedford, Carolyn J. Merry and Jay S. Hobgood, p212-216

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Settlement of Test Footings: Predictions from the University of New Mexico, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), with Ling Xu, Eric Pease and Sameer Tamare, p240-244

A Simple Method of Producing Lunar Soil Simulants for Engineering Studies, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with Scott Pringle and Stewart W. Johnson, p867-877

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Mixing by Shear Instabilities of the Longshore Current, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with E. B. Thornton and J. Oltman-Shay, p376-390

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Flocculation Techniques Used for Dredging Operations, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with Carl W. Smith and Bernard J. Scheiner, p1497-1506

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Wave Scattering by Submerged Porous Disk, with Jianhua Wu, EM Dec. 94, p2575-2587

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The Use of Recyclable Waste Materials in Hot Mix Asphalt Concrete Highway Pavements, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p327-335

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see McAllister, Roy, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p814-817

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Missouri River Master Manual Review and Update, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Roy F. McAllister, Jr., p673-676

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Cisileros, Geration Steel Detailing Neutral File from Modeling Software, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), with J. A. Bohinsky, p254-259

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Civil Engineering Research Foundation

Constructed Civil Infrastructure Systems R&D: A European Perspective, CERF report #94-5010, 1994, 0-7844-0001-6, 145pp.

Federal Public Works Infrastructure R&D: A New Perspective, Report No. 93-EF1003, 1993, 0-87262-943-0,

Geo-engineering: a Vision for the 21st Century, CERF report #94-5020, 1994, 0-7844-0042-3, 48pp. High Performance Construction Materials and Systems: An Essential Program for America and Its Infrastructure -Technical Report, Report 93-5011, 1993, 0-87262-939-2, 205pp.

High-Performance Construction Materials and Systems: An Essential Program for America and Its Infrastructure Executive Report, Report 93-5011.E, 1993, 0-87262-938-4, 32pp.

Civil Engineering Research Foundation, Highway Innovative Technology Evaluation Center

Summary of Highway Product Evaluation Practices and HITEC Needs Survey, CERF Report No. 94-5012, 1994, 0-87262-860-4, 40pp.

Clancy, Patrick

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Reusable Water Exhange Modeling, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with John N. Win-chester, p738-741

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Evaluating Methods for Statistical Analysis of Less than Detection Limit Data Using Simulated Small Samples 2. General Results, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p747-755

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The Behaviour and Design of Stressed-Arch (Strarch) Frames, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with Gregory J. Hancock, p200-209

Some Aspects of Compression Member Design in Australia, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Russell Q. Bridge, p1587-

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Physical Design Aspects of Capping Projects, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1132-1141

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Inter-stellar Propulsion: The Need for Speed, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p737-746

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Natural Analogues and Performance Assessment, (High Level Radioactive Waste Management, High Level Ra-dioactive Waste Program Committee, 1994), p1329-1336

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Use of Abandoned Pipeline to Transport Sediment to Marshes, (*Dredging '94*, E. Clark McNair, Jr., ed., Marshes, (Dredging 1994), p1101-1110

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Facilitating Sustainable Development: Role of Engineer, EI July 93, p225-229 disc: Anada D. Moonasingha, El Oct. 94, p448-449

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Physical Modelling of the Response of Shingle Beaches in the Presence of Control Structures, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p924-937

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Concept for a Mixed Use Recreational Harbor on Lake Superior, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), with Dorian Grilley, p104-113

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Bringing the Construction Foreman Into the Computer Age, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1446-1453

Integrating Pen Computers with Other Keyless Data Systems for Construction Applications, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Charles J. Kibert, p1639-1646

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Advanced Concepts in Cement Solidification and Stabilization Technology, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), with M. Y. A. Mollah, T. R. Hess and R. K. Vempati, p614-615

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see McCartin, Timothy, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1469-1479

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see Garcia, Jorge A., (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994),

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Vacuum consolidation Technology-Principles and Field Experience, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with I. Juran and S. Thevanayagam, p1237-1248

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disc. (of Simplified Strength Prediction for Cold-Formed C- and Z-Shapes, by R. A. LaBoube, ST June 93, p1733-1739), ST Oct. 94, p3099-3102

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Cement Plant CKD Recovery System, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), with M. E. Prokesch, p612

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see Castro, Robert P., (Critical Issues in Water and Waste-water Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p82-89

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see Banavalkar, P. V., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p170-

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Breakout Session 6C: Alternative Fuels, (*Transportation Planning and Air Quality II*, Thomas F. Wholly, ed., 1994), with Gerald Esper and Peter Hagerty, p164-166

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see MacDonald, Ronald R., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1562-1566

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Assessing Roughing Filtration Design Variables, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with Catherine Westersund and M. Robin Collins, p170-177

see Harberg, Mark, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p742-745

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see Lovelace, James T., (disc), CE May 94, p51-54

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see Rogers, Jeremiah, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p833-836

Coleman, Stephen E.

Bed-Form Development, with Bruce W. Melville, HY May 94, p544-560

Coleman, Thomas E. Automated ORP Control for Aerobic/Anoxic Cycling in Oxidation Ditch Treatment, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with H. David Stensel, Darrel Fleischman and W. Brent Denham, p444-451

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Computer-Integrated Construction, with Kenneth F. Rein-schmidt, CE June 94, p50-53

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Advances in Chemical Admixtures for Concrete, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p257-291

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Microtunneling Techniques to Form an Insitu Barrier Around Existing Structures, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with David G. Abbott, p386-394

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A Space Station Simulation: EXEMSI '92 A Study on Confinement and Isolation of a Mixed Crew of Four dur-ing 60 Days, (Engineering, Construction, and Opera-tions in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p494-503

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Software for marina anchoring design on chains or cables, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p398-405

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Performance Summary of the Tanque Verde Project-Geogrid Reinforced Soil Retaining Walls, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), with Donald G. Bright and Ryan R. Berg, p43-56

Collins, Anthony G.

Intelligent Tutoring Systems to Aid Water Treatment Plant Operators, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p107-114

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see Voulgaris, George, (Coastal Dynamics '94, A. S .-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p894-909

Potential demand for passenger travel to orbit, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with Yoichi Iwasaki, Hideki Kanayama and Misuzu Okazaki,

Zero-Gravity Sports Centers, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with Takashi Fukuoka and Tsuyoshi Nishimura, p504-513

Evaluating Ride-Sharing Programs: Massachusetts' Experience, UP Mar. 94, p28-47

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The Role of Partnering and Public Involvement in the Lackawanna River Corridor Greenway Study, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p453-456

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IPA Phase 2 Sensitivity and Uncertainty Analysis, (High Level Radioactive Waste Management, High Level Ra-dioactive Waste Program Committee, 1994), with Richard Codell and M. Rose Byrne, p1480-1491

Management of Sediments on the Red River Waterway Project, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with C. Fred Pinkard, Jr., William H. Espey, Jr. and Ben Littlepage, p1125-1130

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Committee on Employment Conditions, (D. Wayne Klotz, chmn.)

ASCE Guide to Employment Conditions for Civil Engineers, revised edition (M&R No. 55), 1994, 0-7844-0057-1, 30pp.

Committee on Employment Conditions of the Professional Practice Division of the American Society of Civil Engineers, (D. Wayne Klotz, chmn.)

ASCE Salary Survey 1993, 1994, 0-87262-893-0, 66pp.

Nuclear Word Images as Policy Instruments, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Dennis L. Soden, p121-130

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see Kenna, B. Thomas, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p474-483

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Selenite Transport in Unsaturated Tuff From Yucca Mountain, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Ines R. Triay, p2175-2182 Cone, Steven R.

Risk Management Strategies for Natural, Manmade, and Technological Hazards, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p342-344

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Surface Payload Unloading and Deployment Options for a Lunar Return Mission, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with Larry Toups, p1059-1069

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Transferring Construction Technology to the Moon and Back, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with Debra D. Shoots, p1086-1096

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see Brady, A. Gerald, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1600-1605

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Breakout Session 6A: Mass Transportation, (Transporta-tion Planning and Air Quality II, Thomas F. Wholly, ed., 1994), with Lansingh Freeman and Victoria Rankin Marks, p161

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see Veydovec, W., (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p415-422

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see Neserke, George, (Critical Issues in Water and Waste-water Treatment, Joseph N. Ryan, ed. and Mare Ed-wards, ed., 1994), p257-264

Cook, Ronald A.

Hurricanes of 1992: Lessons Learned and Implications for the Future, with Mehrdad Sotani, ed., 1994, 0-7844-0046-6, 808pp.

Lessons Learned from the Hurricanes of 1992, (Hurricanes of 1992: Lessons Learned and Implications for the Fu-ture, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), with Mehrdad Soltani and Timothy A. Reinhold, p799-802

Overview of Hurricane Andrew in South Florida, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p70-83

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Cooke, N.

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Spread Footing Settlement Prediction for the National Geotechnical Experimentation Site Prediction Event: Settlement '94, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), with Q. Tang, M. Zhao, M. Mauldon and E. Drumm, p173-176

Cooley, Jim

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Terrestrial Analogs: Implications for Lunar Lava Tubes, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with B. Ray Hawke, p1138-1145

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Design of Manning's-Rougness-Coefficient Study in New York State, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p677-

Roughness Coefficients for High-Gradient Channels in New York State, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p722-

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Reservoir Estimates for the Sulpicius Gallus Region, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p889-896

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see Shields, F. Douglas, Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p351-355

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see Siddiqui, M., (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p654-661

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Beneficial Use Alternatives for Water Treatment Plant Residuals, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with Carel Vandermeyden and David A. Cornwell, p137-145

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see Stonestreet, Scott E., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p747-751

see Watson, Chester C., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p969-973

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Airport Reconstruction/Rehabilitation: A Case Study, (In-frastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p516-522

Cornett, A. M.

Physical Modelling of Multidirectional Waves, (Ocean Wave Measurement and Analysis, Orville T. Magoon ed. and J. Michael Hemsley, ed., 1994), with M. D. Miles and O. G. Nwogu, p614-629

Cornett, Andrew

Wave Transfermation and Load Reduction Using a Small Tandem Reef Breakwater – Physical Model Tests, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), with Etienne Mansard and Edgar Funke, p1008-1023

Cornett, Andrew M.

A Comparison of Wave Statistics in Uni- and Multidirectional Shoaling Seas, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hems-ley, ed., 1994), with Okey G. Nwogu, p458-473

see Haritos, Nicholas, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p533-546

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Rate of Settlement of Silt Alluvium at Trojan, (Vertical and Horizontal Deformations of Foundations and Embank-ments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1460-1471

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The Evolving Role of Marinas as Public Marine Parks and Water Recreation Areas in Southern California 1960-1994, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p39-48

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see McCleish, William E., (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p597-604

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see Paolella, G., (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p70-98

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see Chambon, Pierre, GT July 94, p1148-1165

see Ambrosi, D., (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p18-29

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Cotroneo, George V.

Hydraulic Engineering '94, 2 vols, ISSN: 1070-1559, with Ralph R. Rumer, ed., 1994, 0-7844-0037-7, 1375pp.

Cottell, Michael N. T.

Correct?, El July 93, p220-224
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disc: James C. Porter, El Oct. 94, p451-454
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Increasing the Credibility of Scientific Analyses, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p296-300

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A Predictive Model of Sewage Pumpout Station Use Among Chesapeake Bay Boaters, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), with Alan Graefe, p59-68

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Dredged Material Dispersion and Accumulation at a Deep Ocean Disposal Site: Comparison of Monitoring Study Results and Model Predictions, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), with Albert Mills Soldate, Jr., Jeff Cox and James A. Blake, p96-102

see Blake, James A., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p111-120

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see Collado, F., (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p556-570

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Analysis of the Juturnaiba Embankment Dam Built on an Organic Soft Clay, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with Márcio S. S. Almeida and Jose Bernardino Borges, p348-363

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Fraser Lands Riverfront Park Shoreline Edge Treatments, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), with Harold C. Westerman, p114-123

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see Wang, J. S. Y., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1915-1921

see Bonner, George P., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p28-37

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Numerical Model Verification Using SUPERTANK Data in Surf and Swash Zones, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C Kraus, ed., 1994), with Nobuhisa Kobayashi and David L. Kriebel, p248-262

Specifying and Attaining Acceptable Marina Tranquility, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p470-479

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see El-Gazairly, Loai F., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1262-

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see Nazarian, S., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p508-515

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see Curtis, D. B., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2228-2236

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The Cigar Lake Analog Study: An Interational R&D Pro-ject, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with F. Peter Sargent, p2237-2242

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Statistically-Based Evaluation of Homes Damaged by Hurricanes Andrew and Iniki, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), with Mark T. Gibson, Edward M. Laatsch, Mark S. Nowak and J. Albert vanOvereem, p519-528

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see Rankin, Arturo L., (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p44-51

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Wave Impacts on Sea Walls and Breakwaters, (Coastal Dyave inputs of the sea wants and Breakments, (Counter Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with M. J. Walkden, P. A. D. Bird, G. N. Bullock, P. J. Hewson and J. Griffiths, p656-670

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Optimal Operation of Multiple-Reservoir System, with Graeme C. Dandy, WR Jan/Feb. 93, p1-17 disc: Ali Diba and Manouchehr Mahjoub, WR Sept./Oct. 94, p742-744 clo: WR Sept./Oct. 94, p744-747

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Packaging Benefits Packages, with Christie C. Allen and C. Janet Whitney, ME Jan/Feb. 94, p19-22

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Roles of the Lunar-Solar Power System In Development of the Resources of Greater Earth for Mankind, (Engineering, Construction, and Operations in Space IV, Rodney Galloway, ed. and Stanley Lokaj, ed., 1994), p638-647

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Construction of Large Lunar Structures by Fusion Welding of Sintered Regolith, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with B. D. Fabes, T. Nakamura and C. L. Senior, p1116-1127

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Utilizing Visco-Elastic Dampers in the Seismic Retrofit of a Thirteen Story Steel Framed Building, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with James Kelly and J. P. Singh, p1286-1291

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Role of Constructed Wetlands in Water Resources Management, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with John S. Crossman and P. Ravishanker, p669-672

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Some Benefits of Grid by Number Sampling, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Panayiotis Diplas, p795-799

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Optical Scatter From a Space Craft Mirror Due to Microscopic Impacts, (Engineering, Construction, and Opera-tions in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p368-377

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Computer-Based Risk Assessment of Competitive Procurement, (Computing in Civil E Khozeimeh, ed., 1994), p1540-1547 in Civil Engineering, Khalil

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hp Version of Finite-Element Mixed Method, with P. K. Basu, EM Nov. 94, p2342-2360

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Using Knowledge Based Systems for Training the Young Engineer, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Michael Mulvihill, p1286-

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Methods to Mitigate Thermally Induced Distortion, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p514-523

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Optimization of Space Lattice Structures with Multimodal Frequency Constraints, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with S. Lukasiewicz, p419-429

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High-Resolution Measurements of Sand Suspension by Plunging Breakers in a Large Wave Channel, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with Stephen F. Barkaszi, Jr., p263-277

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Analysis of Glulam-FRP Beams by a Layer-Wise Formulation, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with Youngchan Kim and Somnath S. Sonti, p67-75

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Wave Reflection: Field Measurements, Analysis and Theoretical Developments, (Coastal Dynamics '94, A. S .-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with Paul A. D. Bird, Geoff N. Bullock and David A. Huntley, p642-655

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Sewerage Failure, Diagnosis and Rehabilitation, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Commit tee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p11-28

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Robotics for Challenging Environments, with Paul R. Klarer, ed., 1994, 0-87262-913-9, 490pp.

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Brief History of the Port of Sines and General Presentation of West Breakwater, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), with Jeno F. Toppler, p3-24

Port of Sines West Breakwater Rehabilitation Strategy Selected, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p25-34

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Dredging Impacts on Delaware Estuary Tides, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), with Poshu Huang, M. Llewellyn Thatcher and Tavit O. Najarian, p86-104 Pollution Susceptibility of Well-Mixed Tidal Basins, with

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ARC/HEC2: an ARC/INFO - HEC-2 Interface, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Mark A. Beavers and Chandrashekar K. Deshakulakarni, p41-44

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Collapse Load Calculated by Probability Based Analysis Compared to Full Scale Tower Test Results, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), with Michael D. Miller, Leon Kempner, Jr., Troy D. Lyver and Wendelin H. Mueller, III., p48-59

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Water Infrastructure Risk Ranking and Filtering Method, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), with Yacov Y. Haimes and Duan Li, p56-72

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Ebrahimpour, A.

Experimental Measurements of Dynamic Loads Imposed by Moving Crowds, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with R. L. Sack, W. N. Patten and A. Hamam, p1385-1390

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Factors Affecting Accuracy of Slope-Area Discharge Determination of the September 1992 Flood in Raven Fork, Western North Carolina, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Thomas J. Zembrzuski, Jr., p645-649

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Field Test of Thermal Precompression, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with Patrick J. Fox, p1274-1286

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Chemical Cleaning Process for Water Pipe Systems, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), with Allen Hieatt and Jerome Ludwig, p288-295

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Extensions of Finite Element Dental Stress Analysis, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with E. M. Ahmed, p1928-1935

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Object-Oriented Finite Volume Dam-Break Model, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), with Driss Ouazar, p186-196

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Flexural Response of FRP Reinforced Concrete Structures, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Ibrahim M. Ibrahim and Ayman S. Mosallam, p583-591

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Knowledge Issues in Modeling, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p579-583

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Nonlinear Dynamic Response of an RC Structure with Advanced Cladding, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Barry J. Goodno and James I. Craig, p1262-1267

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Summer Engineering Outreach Program for Native Americans, (Water Policy and Management: Solving the Prob-lems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p868-872

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Colloidal Fouling of Reverse Osmosis Membranes, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with Xiaohua Zhu, p329-335

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Risk-Based Environmental Priorities: What Priority?, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), with Alan B. Horowitz, p24-33

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Design and Testing of Two Ice-Preserving Winter Lake Aeration Systems, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Heinz G. Stefan, p1326-1330

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Economic Risk Analysis of Building Codes, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), with Chengjun Peng and Ahmad Namini, p674-683

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Burnup Verification Using the Fork Measurement System, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p732-738

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Metal Truss Plates: Less than Full-Depth Penetration and Shear Buckling, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Gerri L. Peot nee Kocher and Matthew J. Mazza, p695-700

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Towards a Rational Method of Predicting Settlements of Spread Footings on Sand, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with Peter K. Robertson and Ahmed A. Soliman, p598-611

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Demonstration of Pneuma Dredging Technology, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with Timothy L. Gahring, p1047-1049

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A Study on Mathematical Model for Sediment Yield in Mountain Regions with Large Hillside Slopes, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Guoliang Yu, p752-756

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Assessment and Recommendations for the Enhancement of the Bardawil Lagoon Outlets, (Coastal Dynamics '94, A. hie Bardawii Lagoon Outees, (Coustat Dynamics 94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with Ahmed A. Khafayg, Mohamed N. Anwar and Mary G. Naffaa, p189-203

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Management Information System Application on a Multi-Million Overseas Project, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Mufid F. Samara, p2157-2174

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Federline, Margaret V. U. S. NRC Staff Views on the Technical Bases for Yucca Mountain Standards, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Janet P. Kotra and James R. Firth, p1422-1428

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Airport Terminal Design Challenges, Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p18-25

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Round Rock Dam, Outlet Works Modification, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p411-423

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Using Planning Scenarios for DOE Radioactive Waste Management: The Case of the Advanced Neutron Source, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1696-1703

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Stress and Settlement of Footings in Sand, (Vertical and Horizontal Deformations of Foundations and Embank-ments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with Ameir Altaee, p1760-1773

disc. (of Fast Foundation for Soft Clay, by Joseph R. Hilton, Jr., Richard L. Novotny and Ronald E. Rager, CE

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Evaporation and Evapotranspiration under Climate Change in New England, with Paul H. Kirshen, WR Jan./Feb. 94,

A Regional Model of Daily Streamflow for the Northeast United States, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Richard M. Vogel, p794-79

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Computer-Aided Structural Engineering Software: The Status of Concurrent Engineering, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p230-237

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Doe's Topical Report on a Methodology to Assess Vibra-tory Ground Motion and Fault Displacement Hazards at the Yucca Mountain Site, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Richard C. Quittmeyer, p2260-2265

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Recent Advances in Engineering Design Methodologies, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p14-24

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disc. (of Seismic Bearing Capacity and Settlements of Foundations, by R. Richards, Jr., D. G. Elms and M. Budhu, GT Apr. 93, p662-674) with M. Shahien, GT Sept. 94, p1632-1634

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Sewers and Computers, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Brian W. Daniels, p836-842

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Lunar Base Aspects for Biotechnology Industry, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with Nickolaus Leggett, p1230-1236

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Categorization of Department of Energy Spent Nuclear Fuel, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p315-319

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An Overview of the Federal Response to Hurricane Iniki, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p294-299

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Chemical Inactivation of Cryptosporidium Parvum in Drinking Water, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with E. Kathleen Black, p42-49

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Bridge Rehabilitation Using Composite Materials, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Michael J. Chajes, Dennis R. Mertz, Victor N. Kaliakin and Ahmad Faqiri, p1140-1147

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What is Computational Hydraulics?, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with A. Blumberg, R. Schmalz and K. Bedford, p482-486

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The Canadian Cement Industry: A Partner in Environmental Improvement, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p406-423

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The Effect of Fuel Type in Unsaturated Spent Fuel Tests, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with M. Gong, J. K. Bates, J. W. Emery and J. C. Holn, p1080-1087

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Liquefaction in Silty Soils: Design and Analysis, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), with R. H. Ledbetter and Guoxi Wu, p51-76

Finno, Richard J.

Damage Evaluation of Building on Piers in Expansive Clay, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with Gary J. Klein and Paul J. Sabatini, p1482-1493

Serviceability of Earth Retaining Structures, Geotechnical Special Publication No. 42, 1994, 0-7844-0051-2,

Finsterle, Stefan

Estimating Two-Phase Hydraulic Properties by Inverse Modeling, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Karsten Pruess, p2160-2167

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see Federline, Margaret V., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1422-1428

Fischenich, J. Craig
Instream and Streambank Environmental Feature Guidelines, (Hydraulic Engineering '94, George V. Cotroneo,
ed. and Ralph R. Rumer, ed., 1994), p406-410

Fischer, Edward E.

Contraction Scour at a Bridge over the Iowa River, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p31-35

Fischer, Martin

How do Integration and Data Models Add Value to a Project?, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Thomas Froese and Douglas Phan, p992-997

see Breuer, James, ME July/Aug. 94, p52-59 see Kunz, John, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p55-62 see Teicholz, Paul, CC Feb. 94, p1,9-11

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Fish, Robert L. see Roy, Ajit K., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p993-999

see O'Connor, Robert E., (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p155-174

Fisher, Deborah J.

see Murtaza, Mirza B., CP Apr. 94, p221-233 see Pena, Matilde G. de, ME July/Aug. 94, p45-51

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see Dexter, Robert J., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p336-343

see Granata, Richard D., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1209-1216

Flanagan, George F.

see Green, Victoria M., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p338-342

Flanagan, Roger D.

Uniform Lateral Load Capacity of Infilled Frames, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Richard M. Bennett, p785-790

Flannigan, Kevin G.

see Lyon, John G., CR June 94, p47-64

Flatman, G. T.

see Yfantis, E. A., (High Level Radioactive Waste Manage-ment, High Level Radioactive Waste Program Committee, 1994), p2063-2068

see Leidwanger, C., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1312-1324

Fleet, Christopher

Implications of ISTEA and CAAA '90 for Transportation Planning Data Needs, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), with Charles Goodman, p76-94

Fleischman, Darrel

see Coleman, Thomas E., (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p444-451

Fleming, Christoper

see Chadwick, Andrew J., (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p950-961

Fleming, John F.

Computing in Analysis and Design in Structural Engineer-ing - An Educator's Point of View, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p362-368

Fleming, Mark

see Emami, Flora, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1152-1160

see Emami, Flora, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1538-1542

Flemming, Ulrich

Case-Based Design in the SEED System, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Robert Coyne and James Snyder, p446-453

Fletcher, C. H.

Estimation of V_{0m} and Identification of the Iniki stimation of V_{0max}, and Identification of the finkt Overwash Line on Kaua'i, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), with T. A. Schroeder, G. M. Barnes, B. M. Richmond and M. A. Hampton, p746-755

Fletcher, S. G.

Stochastic Control With Bounded Sample Paths: An Application to Reservoir Systems, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with K. Ponnambalam, p1025-1029

Flick, Loren D.

see Bodig, Jozsef, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p677-684

Fliedner, Merret

see Casanova, Pascal, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p223-229

Flint, A. L.

Hydrologic Property Alterations Due to Elevated Temperatures at Yucca Mountain, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with M. H. Nash and M. S. Nash, p2101-2105

Flint, Alan L.

Kwicklis, Edward M., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Richard W. Healy, p2341-2351

Spatial Distribution of Potential Near Surface Moisture Flux at Yucca Mountain, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Lorraine E. Flint, p2352-2358

see Flint, Lorraine E., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2315-2322

see Glass, Robert J., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1905-1914

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see Hevesi, Joseph A., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2520-2529

see Hudson, David B., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2168-2174

Shallow Infiltration Processes in Arid Watersheds at Yucca Mountain, Nevada, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Alan L. Flint and Joseph A. Hevesi, p2315-2322

see Flint, Alan L., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2352-2358

see Hevesi, Joseph A., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2323-2332

Flippin, Syndi J.

Comparison of Results from Alluvial Fan Design Methodology with Historic Data, with Richard H. French, IR Jan./Feb. 94, p195-210

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Spread Footing Settlement Prediction, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p164-167

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The Application of Artificial Neural Networks to Civil Engineering, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Nabil Kartam and Tanit Tongthong, p668-675

Neural Networks in Civil Engineering. I: Principles and Understanding, with Nabil Kartam, CP Apr. 94, p131-

Neural Networks in Civil Engineering. II: Systems and Application, with Nabil Kartam, CP Apr. 94, p149-162

Flora, Edna M. C. V.

Analysis of Biomass Distribution and Chemical Interactions in Nitrifying Biofilms, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with Joseph R. V. Flora, Makram T. Suidan and Byung J. Kim, p305-312

Flora, Joseph R. V.

see Flora, Edna M. C. V., (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p305-312

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Florentin, B.

see Abt, S., IR May/June 94, p676-682

Floris, Vinio

Historical, Current and Upcoming Regulation Schedules for Lake Okeechobee, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p53-56

Flug, Marshall

Framework and Status of the ASCE Parks & Recreation Planning Guide, (Marinas, Parks and Recreation Devel-opments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p187-195

Marinas, Parks and Recreation Developments, with Fred A. Klancnik, ed., 1994, 0-7844-0028-8, 620pp.

Flynn, Kevin A.

see Quarles, Stephen L., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p707-

Focht, John A., Jr.

Lessons Learned From Missed Predictions, GT Oct. 94, p1651-1683

Fogstad, Christian

see Currier, Justin, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p592-597

Foley, Christopher M.

Nonlinear Analysis of Structural Frameworks Using Supercomputing Techniques, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Sriramulu Vinnakota, p2058-2065

Foley, Deborah A.

Human-Resource Management for Twenty-First Century: Managing Diversity, El Apr. 94, p121-128

Follette, John G.

Development of Functional Characteristics of Vehicle Mounted Plastic Scintillation System, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Jeffrey J. Tappen and Christopher T. Briggs, p1964-1970

Fonseka, M. C. M.

see Dias, W. P. S., CF Feb. 94, p6-15

Fontaine, Leo F.

see Long, Richard P., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1193-

Fontane, D.

see Abdelkader, H., (Water Policy and Management: Solving the Problems, Darriell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p826-829

Fontane, D. G.

Description of the Application of Goal Programming for Selective Withdrawal Structure Operation, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with M. L.

Schneider, p400-403 Schneider, p400-403 see Shirn, S. B., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p303-306

Fontane, Darrell G.

A Decision Support System for Reassessing the Operation of the Chungju Reservoir System, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Soon Bo Shim and H. S. Lee, p299-302

Water Policy and Management: Solving the Problems, with Harry N. Tuvel, ed., 1994, 0-7844-0020-2, 900pp.

see Azevedo, Luiz G., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p388-391

see Labadie, John W., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p61-64

see Moncada, Enrique, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p111-114

Fonte, A. O. C.

see Jucá, J. F. T., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1202-1213

Foo. Kee Y.

see Brown, E. R., MT May 94, p307-326

Foo, S. H. C.

Prototype Object-Oriented System for Maintenance of Timber Trusses, with G. Akhras, CP July 94, p326-344

Foote, Yolanda L. M.

Velocity Moments on a Macro-Tidal Intermediate Beach, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with David A. Huntley, p794-808

Foraboschi, Paolo

see Blasi, Carlo, ST Aug. 94, p2288-2309

Force, James M.

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Forcier, Gabriel P.

see Leon, Roberto, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1490-1495

The Design of a Proactive Cost Feedback System for Construction Project Management, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Feniosky Pena, p1365-1372

Ford, David T.

see Johnson, William K., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p864-867

Evaluation of the Pagosa Springs Geothermal Reservoir and Implications of Potential Additional Reservoir Development, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Dennis McGrane, p376-379

Ford, William see McCartin, Timothy, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1469-1479

Ford, William Y.

Guide for the Design of Prestressed Concrete Poles, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p591-596

Fordham, John W.

Water Policy Change, Implications for Pyramid Lake, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994),

see Chekuri, Vijay S., (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p1891-1896

Forester, Richard M.

Late Glacial Climate Estimates for Southern Nevada the Ostrocode Fossil Record, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Alison J. Smith, p2553-2561

Late Glacial to Modern Climate Near Yucca Mountain Nevada, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2750-2754

see Sharpe, Saxon E., (High Level Radioactive Waste Man-

agement, High Level Radioactive Waste Program Committee, 1994), p2538-2544 see Smith, Alison Jean, (High Level Radioactive Waste

Management, High Level Radioactive Waste Program Committee, 1994), p2545-2552

Foriero, A.

Pipe Uplift Resistance in Frozen Soil and Comparison with Measurements, with B. Ladanyi, CR Sept. 94, p93-111

Forister, Leann M.

see Weil, Gary J., (Urban Drainage Rehabilitation Pro-grams and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drain-Rehabilitation Programs and Techniques, ASCE, 1994), p173-181

Forndran, Angelika

see Apicella, Guy, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p235-248

Forral, Arthur E.

Comparison of Donnell and Higher Order Nonlinear Models for Dynamically Loaded Composite Plates and Shells, (Engineering, Construction, and Operations in Space IV, Rodney G, Galloway, ed. and Stanley Lokaj, ed., 1994), with Anthony N. Palazotto, p99-108

Forrest, Michael P., Sr.

see Wong, Noel C., CE Sept. 94, p60-62

Forsythe-Fiene, Allyson

Waterfronts: GATEWAY to Your Community, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), with Robert D. Espeseth and Joseph T. O'Leary, p449-459

Fort, James A.

see Engel, David W., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1214-1221

Fortunato, Angré B.

Localized Sigma Coordinates for the Vertical Structure of Hydrodynamic Models, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), with António M. Baptista, p323-335

Foschi, Ricardo

see Adebar, Perry, ST July 94, p2108-2122

Foshee, Forrest

see Hussin, James Drew, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1416-1425

Cover-Subsidence Sinkhole Evaluation of State Road 434, Longwood, Florida, with Brian Bixler, GT Nov. 94, p2026-2040

Foshee, Jon R.

Spread Footing Settlement Prediction for ASCE Specialty Conference "SETTLEMENT '94", (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p186-187

Densification of Asphalt Pavements by Traffic, (Airport Pavement Innovations-Theory to Practice, Jim W. Hall, Jr., ed., 1993), p164-180 disc: Bob Gallaway, TE Nov./Dec. 94, p1006-1007 clo: TE Nov./Dec. 94, p1007

Foster, D. L.

Sediment Suspension Events and Shear Instabilities in the Bottom Boundary Layer, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with R. A. Holman and R. A. Beach, p712-726

Foster, Gene

see Blain, Jerry, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p734-737

Foster, Jack W. see Wang, C.-K. Chris, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-

Foster, Joseph W., III

see Homwongs, Chatree, WR Nov./Dec. 94, p888-905

see Whipple, William, Jr., (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p258-271

Foster, Tammy R.

see See, Thomas H., (Engineering, Construction, and Op-erations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p618-627

Fouad, Fouad H.

Performance of Spun Prestressed Concrete Poles During Hurricane Andrew, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), with Norman L. Scott, Elizabeth Calvert and Michael Donovan, p362-376

Fourney, William L.

see Lin, Chaun-Ping, GT Oct. 94, p1684-1703

Foutch, D. A.

Folice, D. A.
Field Tests of Railway Bridges, (Structures Congress XII,
N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with
D. H. Tobias and J. Choros, p1118-1123

Fowler, D. W. see Rebeiz, K. S., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p821-826

Fowler, David W.

see Rebeiz, Karim S., MT Feb. 94, p150-165

see Landin, M. C., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p526-536

Fowler, Jack

see Spigolon, S. Joseph, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p269-278 see Stark, Timothy D., (Dredging '94, E. Clark McNair, Jr.,

ed., 1994), p420-429

see Stark, Timothy D., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1353-1365

Fowler, Malinda

Development of a Geographical Information System for evelopment of a Geographical Information System for On Farm Management. (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Don R. May, Omnia El-Hakim, A. Bennally, A. Johnson, S. Spaulding, Wilson Begay and Timothy K. Gates, p132-135

Fowles, Deon T.

Hydraulics of Pipelines, with Douglas H. Wegener, ed., 1994, 0-7844-0024-5, 502pp.

Fox. David

842

see Kendall, David, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1527-1553

Cryptosporidium and the Milwaukee Incident, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with Darren A. Lytle, p50-57

see Clark, Robert M., EE July/Aug. 94, p875-887

Fox, Nathaniel S.

Short Aggregate Piers Defeat Poor Soils, with Evert C. Lawton and Richard L. Handy, CE Dec. 94, p52-55

see Lawton, Evert C., (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p121-132

see Lawton, Evert C., (Vertical and Horizontal Deforma-tions of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p962-974

Fox, Patrick J.

C_d/C_c Concept Applied to Compression of Peat, with Tuncer B. Edil and Li-Tus Lan, GT Aug. 92, p1256-1263 disc: G. Mesri, T. D. Stark and C. S. Chen, GT Apr. 94, p764-767 GT Apr. 94, p767-770

see Edil, Tuncer B., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1274-1286

Fox. Peter

Effects of Molecular Oxygen and pH on the Adsorption of Aniline to Activated Carbon, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with Kamalesh Pinisetti, p617-623

Foxworthy, Paul T.

Utilization of Phosphogypsum-Based Slag Aggregate in Portland Cement and Asphaltic Concrete Mixtures, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p75-85

see Alwail, T. A., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1435-1446

Fragaszy, Richard J.

see Lawton, Evert C., GT Sept. 92, p1376-1394 see Alwail, Tahir Ahmed, (disc), GT Oct. 92, p1491-1504

Francingues, Norman R., Jr.

Technical Guidelines for Dredged Material, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with Michael R. Palermo, p616-625 see Averett, Daniel E., (Dredging '94, E. Clark McNair, Jr.,

ed., 1994), p596-605

Frangopol, D. M.

see Al-Harthy, A. S., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p193-

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see Katsuki, Satoshi, EM Nov. 94, p2405-2427

see Zorapapel, George T., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p205-210

Frank, Karl H.

Current and Future Research in Steel Bridge Structures, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1077-1081

Flexural Member Bending Strength Limits in the New LRFD Bridge Code, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p544-548

Frank, R.

see Lehane, B. M., GT Jan. 93, p19-35

Frank, Randy L.

see Hunt, Steven W., (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p137-154

Frank, Roger

see Amar, Samuel, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1602-1610

Franke, Eberhard

Measurements and Numerical Modelling of High Rise Building Foundations on Frankfurt Clay, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with Bernd Lutz and Yasser El-Mossallamy, p1325-1336

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see Blackburn, Joseph M., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1225-1232

see Şafak, Erdal, ST Oct. 94, p2820-2839

Frankel, Arthur Frankoski, Leslie

The Effects of Spatial Resolution in Modeling the North Fork Drainage of the Gunnison River Basin, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p29-32

Franques, J. Thomas

Non-Point Source Pollution Reduction, (Hydraulic Engi-Non-Point Source Pointoin Reduction, (Aryaraute Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Rhonda L. Townsend, p1252-1256 Regional Optimization of Non-Point Source Load Reduction, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Rhonda L. Townsend, p262-266

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Frantz, Patricia G.

Collaboration in the Engineering Classroom, with Gregory C. Frantz and John T. DeWolf, El July 93, p297-303 disc: D. Allan Firmage, EI Oct. 94, p441-443 clo: EI Oct. 94, p443-444

Frantz, Thomas R.

see Price, Mark H., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p358-362

Fredericks, Jeffrey W.

Decision Support System for Conjunctive Use Under Complex Water Right Conditions, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with John W. Labadie and Jon Altenhofen, p582-587

Fredette, T. J.

see Ray, G. L., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p946-955

Fredette, Thomas J.

Disposal Site Capping Management: New Haven Harbor, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1142-

see Murray, Peggy, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p295-303

see Murray, Peggy, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1008-1016

see Silva, Armand J., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p410-419
see Wiley, Mary Baker, (Dredging '94, E. Clark McNair,

Jr., ed., 1994), p1172-1181

Fredlund, Delwyn G.

see Sun, Jichun, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p849-856

Fredsøe, J.

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Freeman, Lansingh

see Coogan, Matthew, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p161

Freeman, Reed B.

Unbound Drainable Base Courses: Permeability Versus Unsurfaced Stability, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Gary L. Anderton, p685-692

Freer, Eduard J.

see Gripentrog, Therese, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p1-6

Freidig, Larry

see Klancnik, Fred, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p7-19

Freifeld, Barry

see Karasaki, Kenzi, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2423-2428

French, Jonathan A.

Offshore Rescue, with Paul Gustafson, John S. Murk and Kellene M. Burn-Lucht, CE Oct. 94, p42-45

disc. (of International Information and Technology Transfer, by Charles G. Gunnerson, El Oct. 91, p336-350), El Jan. 94, p100-102

French, Richard H.

Threshold Precipitation Events and Groundwater Recharge, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Roger L. Jacobson, p298-302

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Frevert, Donald K.

Integration of Water Rights and Network Flow Modeling in the Upper Snake River Basin, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with John W. La-badie, Roger K. Larson and Nancy L. Parker, p577

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Strain Measurement on the Runner of a Hydroelectric Turbine, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p416-424

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Developing Air Concentration and Velocity Probes for Measuring Highly-Aerated, High-Velocity Flow, (Fundamentals and Advancements in Hydraulic Measure-ments and Experimentation, Clifford A. Pugh, ed., 1994), with David G. Ehler and Brent W. Mefford,

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Developments to the IRMA Model of AEC Projects, (Comouting in Civil Engineering, Khalil Khozeimeh, ed.,

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Startplan: Producing Schedule Templates Using IRMA, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Qiang Kevin Yu, p63-70

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Bridge Rating Using Influence Surface for Curved Bridge Structures, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p688-695

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Overweight Trucks and Safety of Bridges, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Osman Hag-Elsafi, p284-289

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Predictability and Sensitivity of Groundwater Transport Models, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Vassilios A. Tsihrintzis, p267-271

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Corrosion Scenario Development for Corrosion Lifetime Prediction of Carbon Steel Used for Geological Disposal Package, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Guen Nakayama and Masatsune Akashi, p977-983

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Numerical Model Verification on Tidal Current in Tokyo Bay, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Toshio Koda-ma and Mutsuto Kawahara, p880-884

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Planning and Improvement of Coastal Area Utilization, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), with Junji Tanaka, Shigeki Nakamura, Toshiya Taneichi and Hideyuki Kida, p222-231

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Poplar Island Reclamation and Beneficial Uses of Dredged Material, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1406-1415

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Comparison of Current Meters Used for Stream Gaging. (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), with Kirk G. Thibodeaux and William R. Kaehrle, p376-385

Effects of Simulated Ice on the Performance of Price Type-AA Current Meter Rotors, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p251-258

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Settlement Analysis of Landfill Liners over Deep Mined Areas, (Vertical and Horizontal Deformations of Foun-dations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with J. J. Bowders and D. T. Mooney, p436-450

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Using Performance Assessment for Radioactive Waste Disposal Decision Making-Implementation of the Method-ology into the Third Performance Assessment Iteration of the Greater Confinement Disposal Site, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Stephen H. Conrad and Thomas A. Baer, p1671-1681

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Engineering, Construction, and Operations in Space IV, 2 vols, with Stanley Lokaj, ed., 1994, 0-87262-937-6, 1560pp.

Galperin, Boris

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Coastal Eutrophication and Temperature Variation, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), with Stilianos Rafailidis, Istvan Bogardi, Lucien Duckstein and Istvan Matyasovszky, p317-330

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Characterization of an ER Active Member, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Robert D. Hanson, p863-868

Gavrilović, Zoran

Analysis of the Torrent Lava Flow Movement and Its Computations - One Example Applied Investigation of Disastrous Torrent Flood, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p650-651

see Brajković, Milivoje, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p640-644

Gaweesh, Moustafa T. K. Bed-Load Sampling in Sand-Bed Rivers, with Leo C. van Rijn, HY Dec. 94, p1364-1384

Visual Investigation of Field Bed-Load Sampling, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p233-241

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see Harik, I. E., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1112-1117

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see Kim, K. W., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

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see Ott, Ed, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1751-1755

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Footing Modulus Near Slopes, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1058-1070

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see Issa, Raja R. A., (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p486-495

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see Schmeckpeper, Edwin R., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p713-718

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Long-Term Monitoring of Civil Structures using Smart Structures Techniques, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1392-1402

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see Capmas, A., (Advances in Cement and Concrete, Mi-chael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p377-405

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Focus on High-Level Waste Repository Management and Regulation a Rate Regulator's Perspective, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1521-1524

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About the Range of Validity of Different Spectral Models for Wind-Generated Gravity Waves, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with Q. José Jiménez, p755-769

Germano, Joseph D.

Environmental Mediation and Open-Water Disposal, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p160-

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Exploration as a Basis of Creative Engineering Design, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1824-1831

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Site Characterization and Related Activities at the Potential High-Level Radioactive Waste Repository Site at Yucca Mountain, Nevada, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Paul L. Cloke, Robert M. Nelson, Jr. and Maxwell B. Blanchard, p2291-2296

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Onika: A Multilevel Human-Machine Interface for Real-Time Sensor-Based Systems, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), with Pradeep K. Khosla, p28-36

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Control of Odor and VOC Emissions at Wastewater Treatment Plants -Boston Harbor Case Study-, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with Cheryl Breen and Mark Laquidara, p548-555

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Some Applications of Neural Networks in Structural Engineering, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p25-36

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Microcomputer-Aided Analysis and Design of Spandrel Concrete Beams Subjected to Combined Bending and Torsional Loads, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Jeffrey Bucholc, p1711-1718

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The Tip Displacement of Drilled Shafts in Sands, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with M. Jamiolkowski, S. Pedroni and R. Salgado, p1039-1057

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Concrete Buildings in Regions of High Seismicity, (Struc-tures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p31-36

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Canisters and Nonfuel Components at Commercial Nuclear Reactors, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee. 1994), with James Disbrow, p1543-1552

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Addendums to the Prediction Package, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p86-91

Data and Prediction Request for the Spread Footing Prediction Event, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), with Jean-Louis Briand,

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EDI and Its Role in Information Management, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Lansford C. Bell and Clarisse Molad, p1798-1805

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Kinetic Interpretations of First Reactivity Experiments on Lunar Basalt Samples, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with C. W. Knudsen, D. J. Brueneman and H. Kanamori, p1167-1177

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Design Criteria for Lunar Construction Equipment, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1237-1255

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Efficient Path Planning Strategies for Unmanned Rover Vehicles, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with George W. Morgenthaler, p1288-1308

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Factors Affecting Degradation of Clay Masses, (*Dredging* '94, E. Clark McNair, Jr., ed., 1994), p449-457

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disc. (of Step-Function Response of Muskingum Reach, by J. C. I. Dooge, M. Perumal and Q. J. Wang, IR Mar/Apr. 93, p410-415), IR May/June 94, p695-697

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see Bourban, Pierre E., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p295-302

see Hoppel, Christopher P. R., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p191-198

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Reoperation of Existing Reservoirs to Serve Changing Needs: Observations on Institutional Inertia, Conflict, and Efficiency, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p565-568

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The Effect the Central Utah Project Will Have On Water Conservation in Utah, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p25-28

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Understanding Discrete Fracture Growth in Rock by Interpreting Acoustic Emissions, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p70-85

Do We Need More Waterbird Nesting Islands in Galveston Bay, Texas? (and if so, how and where do we build them?), (Dredging '94, E. Clark McNair, Jr., ed., 1994), p796-809

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Fracture-Matrix Interaction in Topopah Spring Tuff: Experiment and Numerical Analysis, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Vince C. Tidwell, Alan L. Flint, William Peplinski and Yvette Castro, p1905-1914

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Environmental Uses of Cement in Waste Conditioning (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p499-507

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Evaluation of Silane Sealer Application on Concrete, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Vijay K. Jain, p155-162

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Sensitivity Analysis of Bridge Equations, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p11-15

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Intercomparison of Extremal Wave Analysis Methods Using Numerically Simulated Data, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), with Peter Hawkes, Etienne Mansard, Maria Jesus Martin, Martin Mathiesen, Eric Peltier, Edward Thompson and Gerbrant van Vledder.

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CadVisor (CAD Equipment Analysis and Selection System), (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2140-2144

Computer-Assisted Planning, Programming, Budgeting System (CAPPB), (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p390-395

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Application of Concrete-Filled Steel Tubular Columns in Tall Buildings in Earthquake Area, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Xi Lin and Shao-Huai Cai, p146-151

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An Assessment of the Joint Factor as Used in the Modified MEXE Method, (Computing in Civil Engineering, Khaiil Khozeimeh, ed., 1994), with B. S. Choo, p704-711

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A Framework for a Database of Construction Costs and Productivity at the Process Level for Transportation Infrastructure Development, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1854-1858

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Integrated Planning for International River Basin, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p130-134

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see Schmeckpeper, Edwin R., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1250-1255

Goodyear, David

Construction of the Clark Cable-Stayed Bridge at Alton, Illinois, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Ralph Salamie, p672-676

The New Clark Bridge: Saddle-Draped Cables, with Ralph Salamie, CE Aug. 94, p46-49

Goossens, H.

see Borst, W. G., (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p896-905

Gordaninejad, F.

see Saiidi, M., ST Oct. 94, p2958-2976

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see Sampaco, Casan L., (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p.332-235

Gordon, Christopher M.

Choosing Appropriate Construction Contracting Method, CO Mar. 94, p196-210

Gordon, John A

see Avera, Julia Burr, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1247-1251

Gordon, Paul

disc. (of Masonry Carries the Load, by Daniel P. Abrams, CE Feb. 93, p66-67), CE Jan. 94, p35

Gordon, Richard W.

see McCormick, Michael E., (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p251-263

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see James, Bruce R., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p197-199 Gorini, Richard F.

see Baker, William B., Jr., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p664-672
see Swafford, Russell, (Dredging '94, E. Clark McNair, Jr.,

ed., 1994), p399-409

Gorman, Charles D.

see Rubeiz, Camille G., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1082-1087

Gorman, D. J.

Free-Vibration Analysis of Point-Supported Orthotropic Plates, EM Jan. 94, p58-74

Gorman, Laurel T.

see Pope, Joan, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p906-917

Gorti, S. R.

A Symbol-form Mapping Framework for Conceptual Design Support, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with D. Sriram, p1591-1598

Gossen, Paul A

See Campbell, David M., (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p652-663

see Hamilton, Kris P., (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p612-621

Goto, Shigeru

Dynamic Properties of Gravels Sampled by Ground Freezing, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), with Shin'ya Nishio and Yoshiaki Yoshimi, p141-157

Goto, Yoshiaki

Classification of Semi-Rigid Connections Based on the Elastic-Plastic Mechanical Behavior of Frames, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Satoshi Miyashita and Wai-Fah Chen, p1191-1196

see Kishi, Norimitsu, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1185-

Gottardi, Guido

Predicting the Load-Displacement Behaviour of Spread Footings on Sand, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briand, ed. and Robert M. Gibbens, ed., 1994), with Paolo Simonini, p236-239

Gottlieb, Peter

Design Basis Spent Nuclear Fuel Characteristics, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with J. Kevin McCoy, p845-851

Goudreau, G. L.

see McCallen, D. B., (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p183-192

Goughnour, R. Robert

Finite Strain Consolidation for Vertical Drains, (Vertical and Horizortal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p688-700

Gould, P. L.

Cylinderical Shells, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with R. V. Ravichandran and S. Sridharan, p927-935

Goulter, I. C.

see Sutardi, WR May/June 93, p406-411

Goulter, Ian C.

see Tickle, Kevin S., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p363-367

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see Singhal, Avinash C., ST July 94, p2011-2020

Govindaraju, R. S.

see Shrestha, P. L., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1065-1069

Govindaraju, Rao S.

Movement of Colloids Under Hydraulic Gradients, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Lakshmi N. Reddi, p322-326

Goyal, Sangeeta

Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p842-845

Graber, Hans C., Ph.D.

see Vincent, Charles L., Ph.D., (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p420-432

see Redondo, J. M., (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p350-365

Graefe, Alan

see Cottrell, Stuart, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p59-68

Graefe, Alan R.

see Drogin, Ellen B., (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p132-139

Stat, John C., (Engineering, Construction, and Op-erations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1220-1229

Graf, Richard J.

see Weil, Gary J., (Urban Drainage Rehabilitation Pro-grams and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drain-Rehabilitation Programs and Techniques, ASCE, 1994), p173-181

disc. (of Turbulence Measurements in Open-Channel Flows over Artificial Bed Forms, by D. A. Lyn, HY Mar. 93, p306-326), HY June 94, p782

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Measurement and Prediction of Surface Shear Stress in An-nular Flume, with P. W. James, T. E. R. Jones, J. M. Davies and E. A. Delo, HY Sept. 92, p1270-1286 disc: Cesar Mendoza, HY Mar. 94, p414-415 clo: HY Mar. 94, p416-417

Graham, James

see Morris, Peter H., (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p40-53

Graham, N. J. D.

see Ojha, C. S. P., EE July/Aug. 94, p961-971

Granat, Mitch A.

see Heibel, Deborah R., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p38-47

Granata, Richard D.

Monitoring and Predicting Corrosion of Weathering Steel, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with James C. Wilson and John W. Fisher, p1209-1216

Grandón, Francisco

see Ayala, Luis, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p73-77

Grant, Gordon E.

A General Theory of Channel Adjustment in High Gradient Streams, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p817-

see Hammamji, Yousef, (disc), GT Sept. 92, p1431-1448

Grávalos, José M.

see Gago, José, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1174-1178

Graves, M. R.

see Ibrahim, S. S., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p13-18

Graves, R. C.

see Harik, I. E., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1112-1117

Gray, Donald H.

see Garcia-Lopez, Manuel, CE Dec. 94, p44-47

Gray, Kimberly A.

see Dieckmann, Melissa S., (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p726-732

see Hilarides, Roger J., (Critical Issues in Water and

See Financies, Roger J., (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p733-736
see Schmelling, Daniel C., (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p751-755

Gray, W. J.

Gray, W.J.
Interlaboratory Comparison of UO₂ Dissolution Rates,
(High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with J. C. Tait, S. A. Steward and D. W. Shoesmith, p2597-2601

see Steward, S. A., (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p2602-2608

Graybill, Donald A.

Tree-Rings and Climate: Implications for Great Basin Paleoenvironmental Studies, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with M. R. Rose and Fred L. Nials, p2569-2573

Grayman, Walter

see Males, Richard, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p274-279

Grayman, Walter M.

Computer Software for Risk Analysis, p350-351 see Clark, Robert M., WR Nov./Dec. 94, p871-887 see Rossman, Lewis A., EE July/Aug. 94, p803-820

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see She, K., WW Jan./Feb. 94, p20-36

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Green, David D.

Setting Competitive Water Reuse Rates, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Stephen H. Riley, p802-805

Green, Malcolm O.

Wave-Height Distribution in Storm Sea: Effect of Wave Breaking, WW May/June 94, p283-301

see Pang, Alan AhKum, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1538-1543

Green, R.

Progress in Reinforced Concrete Column Design, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p455-460

Green, Roger L

see Prechaverakul, Sakchai, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1892-1899

Green, Ronald T.

see Dodge, Franklin T., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2217-2227

Green, Victoria M.

Wanagement of HFIR Spent Fuel, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with John M. Begovich, A. L. Lotts and George F. Flanagan, p338-342

Greene, Brian H.

Locking Into Success, with Andrew Schaffer, Donald A. Bruce and John A. Gerlach, CE Apr. 94, p48-50

Greener, Gerald E.

Comparing Dredging Costs Across Projects, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with Greg Hartman, p1325-1334

One Mans View of Dredging Equipment 2020, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p683-689

Greengard, Alison

see Rousseau, Joseph P., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2764-2773

Greening, W. Trevor

see Chrzanowski, Adam, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p721-731

Greenwald, Jeffrey H.

see Shaker, Steven M., CE May 94, p64-67

Greenwood, Brian

see Aagaard, Troels, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p14-28

Greenwood, David J.

GIS Application for Floodplain Analysis and Mapping, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Ramzi K. Bannura and Myles E. Powers, p232-236

Greges, Monte

Ocean Disposal with Capping of Dioxin Contaminated Sediment: New York Case History #1, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1278-1284

Gregg, Tony T.

Austin's Strategy for Integrated Water Resource Planning, (Revenue Enhancement for Water and Wastewater Systems, Jerry R. Rogers, ed. and William P. Bullock, Jr., ed., 1994), with Maureen McReynolds and Eric Rothstein, p1-7

Grenier, R. R.

Comparison of 2D and 3D Models for Computing Shallow Water Tides in a Friction-Dominated Tidal Embayment, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), with R. A. Luettich, Jr. and J. J. Westerink, p58-70

Grenney, William J.

see Karunanithi, Nachimuthu, CP Apr. 94, p201-220

Data Capture with GPS for Sewer Map Updates, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Rodolfo B. Fernandez, p1615-1622

Greulich, Gunther

Quality in Constructed Project: Surveying Engineering, with Wayne H. Valentine and R. R. Chamard, SU May 94, p52-61

Greve, Hans

see Ouwerkerk, Ruud, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p690-700

Structural Analysis for Structural Design, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p133-144

Grierson, Donald E.

Conceptual Design Using Evolutive-Cognitive Computing Techniques, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2183-2190

Griffin, Brand Norman

A Space Suit for Productive and Safe Extravehicular Activity (EVA), (Engineering, Construction, and Opera-tions in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1372-1381

Griffin, D. M., Jr.

see Cheng, Ling, EE Jan./Feb. 94, p138-153

Griffin, M. D.

see DeGanyar, T. J., (Spatial, Lattice and Tension Struc-tures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p47-56

Griffin, Michael D.

Active Versus Passive Radon Monitoring at the Yucca Mountain Site, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1953-1958

Space-Frame Pyramid, with Michael R. Patterson and Tejav J. DeGanyar, CE Nov. 94, p68-70

Griffin, Michael S.

Design and Operation of a System to Monitor Sediment Deposition for Protection of an Endangered Mussel, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), with David S. Mueller, p472-481

Griffin, Nicholas L.

High Level Waste Disposal and Reprocessing in the UK, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1690-1695

Griffis, F. H. "Bud"

ADR, TQM, Partnering, and Other Management Fantasies, El Oct. 92, p331-344

disc: William J. O'Brien and Kelly Jean Fergusson, El Apr. 94, p235-237

Griffis, Fletcher H.

Dredging Research Program Economic Benefits Study, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with Sotiris Pagdadis, Charles E. Jettmar and Russell K. Tillman, p1335-1354

Griffith, Andrew F.

Feasibility Analysis of Automated Material Handling for Hazardous Waste Remediation, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), with Carl T. Haas and Richard L. Tucker, p338-346

Griffiths, D. V.

see Paice, Geoffrey M., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p628-639

Griffiths, J.

see Crawford, A. R., (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p656-670

Grigg, Neil S.

Drought and Water-Supply Management: Roles and Re-sponsibilities., with Evan C. Vlachos, WR Sept./Oct. 93. p531-541

disc: William Whipple, Jr. and William J. Werick, WR Nov./Dec. 94, p1003-1004

WR Nov./Dec. 94, p1005

Education and Research in Water and Environment: Collaboration Between Minority and Majority Institutions, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p81-84

Infrastructure and Economic Development: Civil Engineer-

ing Perspective, EI Jan. 93, p51-61

Ananda D. Moonasingha, El Apr. 94, p232-233 Erling A. Tufte, El Apr. 94, p234

clo: El Apr. 94, p234-235

Infrastructure Management: U.S. and Japanese Systems Contrasted, UP Mar. 94, p1-13 Infrastructure: a More Comprehensive Policy is Needed, EI

Apr. 94, p183-192

Maintenance Management Systems for Urban Drainage, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p2-10

disc. (of Holistic Approach to Irrigation Management in Developing Countries, by Phillip Z. Kirpich, IR Mar./ Apr. 93, p323-333), IR Sept./Oct. 94, p997-998

see Saito, Laurel, WR Sept./Oct. 94, p587-612

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Past, Present, and Future of ASCE: Equal Opportunity Pro-

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rilli. S. T.

Shoaling of Solitary Waves on Plane Beaches, with R. Subramanya, I. A. Svendsen and J. Veeramony, WW Nov./Dec. 94, p609-628

Grilli, Stéphan T.

ASA.WAVES: An Interactive PC-based Wave Forecasting Tool, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), with T. Opishinski, M. L. Spaulding and T. Isaji, p890-904

Characteristics of Solitary Wave Breaking Induced by Breakwaters, with Miguel A. Losada and Francisco Martin, WW Jan./Feb. 94, p74-92

Grimm, Clayford T.

Void Mortar Joints: Bane of Brick Masonry, CO Mar. 94, p152-161

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see Seboldt, Wolfgang, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1210-1219

Grindrod, Peter

How Should the Migration and Retardation of Colloids be Characterized?, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2709-2718

Saturation and Gas Migration Within Clay Buffers, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Michael Impey, Syra Saddique and Hiroyasu Takase, p2069-2075

see Takase, Hiroyasu, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p491-500

Grinnell, G. C. K.

The Case for Southern Nevada's Thirst, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p319-322

Gripentrog, Therese

Menomonee Valley Greenway Feasibility Study, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), with Wink Hastings and Eduard J. Freer, p1-6

Grismer, M. E.

Effects of Air Compression and Counterflow on Infiltration into Soils, with M. N. Orang, V. Clausnitzer and K. Kinney, IR July/Aug. 94, p775-795

Grivas, Dimitri A.

Integrating Computer Application for Pavement Management: A Case Study, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with B. Cameron Schultz and Richard Garrabrant, p1951-1958

Grobler, Francois

Beyond CPM: The Deck-of-Cards Paradigm, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with K. Praveen Reddy and Carol Subick, p2046-2053

see Hamilton, Gary D., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1430-1437

see Rao, Guru N., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p33-40

see Rao, Guru N., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p208-215

Grodek, Tamir

Step Pool Geometry and Flow Characteristics in Low-Sediment-Storage Channel Beds, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Moshe Inbar and Asher P. Schick, p819-823

Grogan, William P.

Evaluation of Drainable Base Courses for Pavements, (In-frastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p693-700

Gross, J. L.

Extreme Winds Estimation by 'Peaks Over Threshold' and Epochal Methods, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with N. A. Heckert, J. A. Lechner and E. Simiu, p1472-1477

Modeling of Extreme Loading by 'Peaks Over Threshold' Methods, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), with N. A. Heckert, J. A. Lechner and E. Simiu, p135-147

Gross, Terry

see Iyer, Srinivasa L., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p743-750

Grossman, Gershon

Tension Element to Reduce Loads in Rim Support of Inflatable Reflector, AS Apr. 94, p129-142 err: AS Oct. 94, p463

Groton, James P.

disc. (of More Than an Underground Success, by James Denning, CE Dec. 93, p42-45), CE Mar. 94, p35-36

Groves G V

TEM Studies of Carbonation and ASR, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p211-216

Grow, John A.

Oil and Gas Exploration Near Yucca Mountain, Southern Nevada, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Charles E. Barker and Anita G. Harris, p1298-1315

Gruber, K.

Metakaolin Increases Strength and Lowers Permeability of High Performance Concrete, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p613

Gruber, Karsten

see Krätzig, Wilfried B., (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p897-906

Gruener, John E.

Science Operations and Engineering Impacts to Lunar Outpost Design, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with David S. McKay, p998-1007

Grundemann, Paul

see Aikin, Andrea, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p592-595

see Hemenway, Courtney C., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p596-599

Grundler, Christopher

Protecting the Great Lakes: Asking the Right Questions, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p107-109

Grunthaner, F. J.

see Butler, M. A., (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1345-1354

Grutzeck, Michael W.

Advances in Cement and Concrete, with Shondeep L. Sarkar, ed., 1994, 0-7844-0034-2, 621pp.

Grygiel, Michael L.

see Altomare, Philip M., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1762-1769

3u. W. H.

Postearthquake Deformation Analysis of Wildlife Site, with N. R. Morgenstern and P. K. Robertson, GT Feb. 94, p274-289 Guan, F.

Three-Dimensional Dynamic Response of Twin Cavities due to Traveling Loads, with I. D. Moore, EM Mar. 94, p637-651

Guan, Lichu

see Lin, Fwu-Ding (Kim), (Computing in Civil Engineer-ing, Khalil Khozeimeh, ed., 1994), p1975-1982

Guan, Liqiu (Lichu)

Three Dimensional Simulation of Progressive Tunneling Process for Lining Design of Intersecting Tunnels in Soft Rock, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Steven H. Baldauf and Wern-Ping (Nick) Chen, p2006-2013

Guarascio, Joseph

Mars Terraformation Revisited, (Engineering, Construc-tion, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p774-781

Gucunski, Nenad

disc. (of Effects of Multiple Modes on Rayleigh Wave Dispersion Characteristics, by Kohji Tokimatsu, Shuji Tamura and Hisaya Kojima, GT Oct. 92, p1529-1543). GT Feb. 94, p466-468

Guddati, Subbarao L. Recovery of Chromium from Spent Plating Solutions by a Chromyl Chloride Process, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with Thomas M. Holsen and J. Robert Selman, p241-248

Guensler, Randall

Data Needs for Evolving Motor Vehicle Emission Modeling Approaches, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p167-196

see Washington, Simon, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p118-138

Guertal, William R.

Characterization of a Desert Soil Sequence at Yucca Mountian, NV, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Alan L. Flint, Lon L. Hofmann and David B. Hudson, p2755-2763 see Hudson, David B., (High Level Radioactive Waste

Management, High Level Radioactive Waste Pro-

gram Committee, 1994), p2168-2174

Guevara, Eduardo I.

see McClure, Ghyslaine, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p259-268

Gugel, John G.

Model for Constructability Approach Selection, with Jeffrey S. Russell, CO Sept. 94, p509-521 see Russell, Jeffrey S., CO Mar. 94, p180-195

Guggenberger, Johann

see Ulm, Franz-Josef, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1427-

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Stochastic Modeling of Spatial Heterogeneities Condi-tioned to Hydraulic and Tracer Tests, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with D. W. Vasco, J. C. S. Long and Stratis Vomvoris, p2624-2632

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Behavior of Hydraulic Jump Basins, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Emmett M. Laursen and Margaret S.

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Measuring Air Concentration in Flowing Air-Water Mix-tures, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), with Tony A. Rizk, Emmett M. Laursen and Margaret S. Petersen, p289-295

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Case Study - Performance of Diaphragm Walls During Construction; Predictions vs. Field Measurements, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Mehrdad Mirzakashani, p264-270

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Flood Loss Assessment with Integrated Measures, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Sta-khiv, ed., 1994), with Duan Li, Vijay Tulsiani, Eugene Z. Stakhiv and David Moser, p219-233

Risk-Based Decision Making in Water Resources VI, ISSN: 1063-5076, with David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994, 0-7844-0032-6, 381pp.

When and How Can You Specify a Probability Distribution When You Don't Know Much?, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), with Timothy Barry and James H. Lambert, p19-

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West Columbus, OH LPP Gate Closure Analysis - A Study of the Requirements for Multiple Closures, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Surya Bhamidipaty, p472-476 see Fripp, Jon B., (Hydraulic Engineering '94, George V.

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Reliability and Validity of Modeling Sedimentation and Debris Flow Hazards Over Initially Dry Areas, (Modelling of Flood Propagation Over Initially Dry Areas, Pao-lo Molinaro, ed. and Luigi Natale, ed., 1994), with Robert C. MacArthur and Vito A. Vanoni, p342-356

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OODBMS in AEC Software Development: The Highs and Lows of Developing a Commercial Application, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Lisa Bell, Wade Cohn, Francois Grobler and Kyungrai Kim, p1430-1437

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Current State of Development and Future Trends in Employment of Air-Supported Roofs in Long-Span Applications, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with David M. Campbell and Paul A. Gossen, p612-621

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Assessing Effects for Disposal Sites off San Francisco, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), with Allan Y.

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Short and Long Wave Transformation Modelling in a Large Scale Flume, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with J A. (Dano) Roelvink, p503-517

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BRICAL: A Multimedia Intelligent Educational System for Bridge Engineering, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Yoshito Itoh, p1671-1678

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Linking Hydrodynamic and Biogeochemical Transport Models for Estuarine and Coastal Waters, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p591-608

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Structural Shape Analysis under the Prescribed Displacement Mode, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with Kazual and p694-703

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SELECTCRANE: An Expert System for Optimum Crane Selection, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p958-963

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U.S. / Japan Large Scale Cooperative Research Program for Steel Structures, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p103-108

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Ultimate Strength of R/C Cooling Tower Shell, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with Shiro Kato and Hiroshi Nakamura, p877-886

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Water Chemistry of Lead Corrosion Control, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with Jonathan A. Clement and Michael R. Schock, p34-41

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Simulating Hourly Hydropower Operations for the Assessment of Environmental and Economic Impact, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with A. Spreck Rosekrans and Ronald E. Moulton, p553-556

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Structured Tradeoffs Preference Elicitation: Evaluating CRWMS Design and Operations, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p619-626

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A Decision Support System for the Expansion of International Operations of A/E/C Firms, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with D. W. Halpin and Jorge A. Vanegas, p735-742

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A Nested-Model Approach to Investigate Climate Change, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with George H. Leavesley, p477-480

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Groundwater Modelling As a Management Tool, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Al Eddebbarh and Paul Grundemann, p596-599

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Cementing Action in Non-Portland Cement Systems: Sulpho-Pozzolanic and Silico-Pozzolanic Reactivity, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeen L. Sarkar, ed., 1994), with E. E. Berry, p329-336

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see Wigand, Peter E., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2574-2583

Hemsley, J. Michael

see Magoon, Orville T., ed., Ocean Wave Measurement and Analysis

see McGehee, David D., (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p208-222

Henderson, James L.

A Gaming Analysis of Drought-Coping Policy Options, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with William B. Lord and Russell L. Gum, p620-623

Henderson, John R.

Involving the People: Re-Connecting American Citizens to their Local Government, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p377-386

Henderson, M. P.

see Zoghi, M., (Infrastructure: New Materials and Meth-ods of Repair, Kim D. Basham, ed., 1994), p1163-1170

Henderson, R. Craig

A Peice-wise Linear Evaluation of Masonry Infills Subjected to Out-of-plane Seiesmic Drift, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with W. Dale Jones, E. G. Burdette and Max L. Porter, p803-808

Hendrickson, Chris

see Diaz-Calderon, Antonio, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1497-1504

Hengst, Robert

Concrete Watertight Structures and Hazardous Liquid Containment, 1994, 0-87262-791-8, 150pp.

Henkel, Christopher J.

Utility Industry Perspectives on Repository Licensing, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Jay E. Silberg and Mindy A. Buren, p1567-1572

Henley, Leslie R.

Community Partnering in Accelerated Construction Program, UP June 94, p74-86

Henning, Bruce E.

see Connor, Keith R., CE Feb. 94, p40-43

Henriksen, Sten K.

see Velivasakis, Emmanuel E., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1127-1134

Henriques, Fausto Gonçalves

Protecção Provisória do Molhe Oeste do Porto de Sines, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), with Ismael Byscaia de Carvalho, p35-53

Henriques, Fausto Goncalves

Temporary Protection of the West Breakwater of the Port of Sines, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), with Ismael Byscaia de Carvalho, p54-69

Henry, Karen Larson

To Microtunnel or Not to Microtunnel? The Construction of the Crown Point Trunk Sewer, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), with Dave Zoumaras, p73-81

Henry, Robert M.

Computer - Fluent Civil Engineer: What Does It Mean?, CC Apr. 94, p1-4,6

Henry, Roger M.
Role of Advanced Computer Technology in Construction Industry, CP July 94, p385-389

see Carmeliet, J., EM Oct. 94, p2013-2027

Henson, Henrie

see Burroughs, Dan, CE Jan. 94, p62-64

Herbich, John B.

see Krishnamohan, Ram, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1152-1161

Heredia-Zavoni, Ernesto

Seismic Random-Vibration Analysis of Multisupport-Structural Systems, with Erik H. Vanmarcke, EM May 94, p1107-1128

Hering, Janet G.

see Ching, Hsiao-Wei, EE Jan./Feb. 94, p169-189

Hernandez, R.

see Davalos, J. F., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1316-1321

Herndon, J. Earl, Jr.

Computing in Analysis and Design in Structural Engineer-ing Education, Practice and Registration: A View from the National Council of Examiners for Engineering and Surveying, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p377-385

Hernried, Alan G. see Charland, James W., (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p791-800

see Charland, James W., ST Dec. 94, p3649-3665

see Magaña, Mario E., (Analysis and Computation, Frank-

lin Y. Cheng, ed., 1994), p317-326

see Wilkening, Craig R., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p136-140

Herr, Kenneth A.

The Use of Type K Expansive Cement Concrete for New Construction and Rehabilitation of Concrete Bridge Decks, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Robert T. Barclay, p955-962

Herren, L. Tandy

see DeWispelare, Aaron, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1614-1621

Herricks, Edwin E.

Wet Weather Issues in Receiving Systems: Can a Pendu-lum Swing Upstream?, (National Water Resources Reg-ulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p168-176

Herron, Lindsay N.

Nuclear Propulsion: Safety Measures and Concerns, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p747-750

Herth, Steven J.

Design of Half-Through or "Pony" Truss Bridges Using Square or Rectangular Hollow Structural Sections, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p210-220

Hertlein, Bernard H.

The Hidden Cost of Clean Air Regulations, (Infrastruc-ture: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Matthew R. Johnson, p1119-1126

Hertzog, Phillip

see Kendall, David, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1527-1553

Hervouet, J.-M.

Finite Element Algorithms for Modelling Flood Propaga tion, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), with J.-M. Janin, p102-113

see Bates, P. D., (Modelling of Flood Propagation Over In-itially Dry Areas, Paolo Molinaro, ed. and Luigi Na-

tale, ed., 1994), p243-256

Herzik, Eric B.

What's Science Got To Do With It?: The Use of Public Opinion in Developing Nuclear Waste Policy, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with John L. Dobra, p112-120

Hess, Kurt W.

Development of the Tampa Bay Tidal Current Atlas, (Estu-arine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p489-499

Hess, Michael R.

see Roddis, W. M. Kim, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1687-1694

Hess, T. R.

see Cocke, D. L., (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p614-615

Hetherington, Mark D.

see Lawton, Evert C., GT Sept. 92, p1376-1394

Hevesi, Joseph A.

A Preliminary Characterization of the Spatial Variability of Precipitation at Yucca Mountain, Nevada, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Dale S. Ambos and Alan L. Flint, p2520-2529

Verification of A 1-Dimensional Model for Predicting Shallow Infiltration at Yucca Mountain, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Alan L. Flint and Lorraine E. Flint, p2323-2332

see Flint, Lorraine E., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2315-2322

see Crawford, A. R., (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p656-670

Heyl, Michael G.

Design Aspects of Modeling Reclaimed Water Use, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with David K. Ammerman and Jeffrey F. Payne, p698-701

Heyliger, P. R.

Free Vibrations of Laminated Anisotropic Cylindrical Shells, with A. Jilani, EM May 93, p1062-1077 disc: S. B. Dong, EM July 94, p1603-1604 clo: EM July 94, p1604-1605

Hicks, F. E.

see Steffler, P. M., (disc), HY Aug. 93, p895-910

Hicks, R. E.

see Taylor, P. R., (Engineering, Construction, and Opera-tions in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1178-1187

see Partl, M. N., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p849Hieatt, Allen

see Edstrand, Craig, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994),

Higashibata, Yasuo

see Inoue, Kazuo, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p152-157

Higazy, M.

see Masri, S. F., EM Aug. 94, p1696-1717

Higgins, Thomas J.

California Airports: Ground Access Vehicle Trips, Emissions and Emission Reduction Strategies, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p102-126

High, Greg

Harbor and Marina Improvements McKinley Marina Milwaukee, Wisconsin, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), with Dave Werren, p489-498

High Level Radioactive Waste Program Committee, (Thomas L. Sanders, chmn.) High Level Radioactive Waste Management, 4 vols., 1994,

0-7844-0022-9, 3005pp.

Higuchi, Kohei

see Takeuchi, Toru, (Spatial, Lattice and Tension Struc-tures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p684-693

Hikosaka, Hiroshi

see Bolander, John E., Jr., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p475-482

Hilarides, Roger J.

Innovative Treatment of Soil Contamination: Radiolytic Destruction of Dioxin and Co-Contaminants by Cobalt-60, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with Kimberly A. Gray, p733-736

Hilbig, Brigitte

see Blake, James A., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p111-120

Hilchey, John D.

The Lunar Ultraviolet Telescope Experiment (LUTE), (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with Max E. Nein, p1431-1441

Hildemann, Lynn M.

see Lin, Jin-Sheng, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p580-584

Hilding, Karin

A Survey of Stormwater Infiltration Basins in the Puget Sound Region, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Rich Horner, p722-725

Hill, Carleen

see Wadkins, Mindy, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p232-237

see Bennett, B. G., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p961-970

see Bennett, B. G., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p991-1000

Lateral Response of Unreinforced Masonry Infill Frame Panels, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p77-83

Hill, Lynn

Large Diameter Storm Sewer with Energy Dissipation Structures, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), with John Maki and Jerry Pfarr, p395-410

see Troch, Steven J., (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), Hill, Randall C.

Dual Purpose Pipeline in the 1900s Environment, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Dougli H. Wegener, ed., 1994), with Javier Saunders, p119-128

Hill, Robert

Measurement and Automatic Control of Chlorination, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with James Martin, p718-725

Hillerson, Charles

Missouri River Economic Impacts Model, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Ronald Roberts, p637-640

Gateway to Columbus, with Daniel K. Burroughs, CE Dec. 94, p58-61

Hills, David J.

see Tajrishy, Massoud A., IR July/Aug. 94, p716-731

Hills, J. G.

Deepwater Waves and Tsunami Produced by the Impacts of Small Asteroids", (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1365-1371

Hilton, Joseph R., Jr.
Fast Foundation for Soft Clay, with Richard L. Novotny and Ronald E. Rager, CE Mar. 93, p62-65 disc: Bengt H. Fellenius, CE Apr. 94, p35

Himmelberger, Jeffery J.

Public Opinion Polling and the Yucca Mountain Controversy: A Seven Year Inventory (12/86-8/93), (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Mike L. Baughman, p142-149

Hines, Franklin

Rigid Pavement Rehabilitation at the San Marcos Municipal Airport, San Marcos, Texas, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with David Pickett, p531-538

Hinker, Christopher P.
Dulles International Airport Construction Challenges, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p26-29

Hinton, Steven W.

NCASI Experiment Related to Validation of Equilibrium NCASI Experiment Related to Validation of Equilibrium Partitioning (EP) Theory, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p737-742
Oxygen Utilization of Trickling Filter Biofilms, with H. David Stensel, EE Sept./Oct. 94, p1284-1297

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The Contractor-Subcontractor Relationship: The Subcontractor's View, with Andrew Tracey, CO June 94, p274-287

Properties of Soundless Chemical Demolition Agents, with James Brown, CO Dec. 94, p816-827

Hinze, William J.

see Moeller, Dade W., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1417-1421

Hirasawa, Gakuhito

Hillsawa, Gardinio A Frame-Based Drawing Management System Based on Building Object Model, (Computing in Civil Engineer-ing, Khalil Khozeimeh, ed., 1994), with Yusuke Yamazaki, p555-562

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see Ahsan, A. K. M. Quamrul, HY Nov. 94, p1264-1273

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see Wadkins, Mindy, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p232-237

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Hite, John E., Jr.

Velocity of Air-Core Vortices at Hydraulic Intakes, with Walter C. Mih, HY Mar. 94, p284-297

see Stonestreet, Scott E., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p401-405

Hjalmarson, H. W.

see Phillips, J. V., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p707-711

Hjaroar, Bjarni P.

see Björnsson, Hans, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p964-971

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General Stochastic Unit Hydrograph, with Menghua Wang, IR Jan./Feb. 94, p138-148

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see Banan, M. R., ST Nov. 94, p3243-3258 see Banan, M. R., ST Nov. 94, p3259-3283

Ho, C, L

see Alwail, T. A., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1435-1446

Ho, Clifford K.

Modeling Infiltration Into a Tuff Matrix From a Saturated Vertical Fracture, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1897-1904

Studies of Non-Isothermal Flow in Saturated And Partially Saturated Porous Media, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Kevin S. Maki and Robert J. Glass, p2481-2491

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see Chan, Siu Lai, ST Apr. 94, p1075-1087

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Predicted Behavior of Two Centrifugal Model Soil Walls, with R. Kerry Rowe, GT Oct. 94, p1845-1873

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Hoadley, Peter G.

see Kelly, William E., (disc), El Apr. 93, p163-169

Hobbs, Benjamin F.

Climate Warming and Great Lakes Management, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), with Philip T. Chao, Mohammed Nayal and William T. Bogart, p295-316

Emission-Cost Trade-offs and Rate Feedback for Electric Utilities, EY Dec. 94, p103-121

Risk Management Strategies for Natural, Manmade, and Technological Hazards, p348-349

What Do SO₂ Emissions Cost? Allowance Prices and Externality Adders, EY Dec. 94, p122-132

Hobbs, R.

disc. (of Mechanisms of Shaft Friction in Sand from Instrumented Pile Tests, by B. M. Lehane, R. J. Jardine, A. J. Bond and R. Frank, GT Jan. 93, p19-35), GT Aug. 94, p1449

Hobgood, Jay S.

see Chu, Yi-Fei P., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p212-216

see Kelley, John G. W., (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p202-215

see Kelley, John G. W., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p227-231

Hocherman, Irit

see Prashker, Joseph N., TE Sept./Oct. 94, p843-859

Hodel, Hanspeter

A new approach for the estimation of extreme roughness in torrents by Hydraulic and Photogrammetry, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Thomas P. Kersten and Isidor Storchenegger, p697-701

A New Formula for Mean Velocity in Torrents, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Isidor Storchenegger, p667-671

Hodge, Charles S

Concerns, Worries, and Wringing of Hand (Part 1), CC Jan. 94, p12-13

Keeping Up With Computers, CE June 94, p70-72 Operating System Rundown, CC May 94, p14-15

Still More Concerns, Worries, and Wringing of Hands, CC Mar. 94, p10-11

Hodges, Marcus D.

The Day User, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p506-513

Master Planning — "Fact or Fiction", (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p77-82

Hoekstra, P.

The Nourtec Experiment of Terschelling: Process-Oriented Monitoring of a Shoreface Nourishment (1993-1996), (Castal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with K. T. Houwman, A. Kroon, P. van Vessem and B. G. Ruessink, p402-416

Hoekstra, Piet

Hydrodynamic Processes on the Lower Shoreface of the Dutch Coast, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with Klaas T. Houwman, p852-866

Hoernes, Stephan

see Seboldt, Wolfgang, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1210-1219

Hoffman, M. Alle

Commercial Vehicle Operations and Automatic Vehicle Identification Applications at Airports, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), with Emily Van Wagner, p162-173

Hoffman, Regis

Simulation of Autonomous Robotic Excavation, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), with Reid Simmons, n115-122.

Hofmann, Lon L.

see Guertal, William R., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2755-2763

Hofmann, Renner H

Published Attenuation Functions Compared to 6/29/1992 Little Skull Mountain Earthquake Motion, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Abou-Bakr K. Ibrahim, p2402-2408

Hogan, S. J.

Slender Rigid Block Motion, EM Jan. 94, p11-24

Hogan, Scott A.

see Abt, Steven R., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p467-471

see Abt, Steven R., EY Aug. 94, p51-66

Hoh, J. (

see Finn, P. A., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1080-1087

Hoisington, David

see Otter, Paul, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p435-444 Hoit, Marc I.

see Ashley, Frances K., (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p415-

Hojaji, H.

see Chen, P. C., (Engineering, Construction, and Opera-tions in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1422-1430

Holdnak, Andrew

see Drogin, Ellen B., (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klanc-nik, ed., 1994), p132-139

Holeyman, Alain E.

High-Strain Kinetic Testing of Deep Foundations, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p934-939

Hollaway, William

see Emami, Flora, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1152-1160

Hollaway, William R.

System Implementation of the Multipurpose Canister, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Robert Rozier, p1137-1142

Holley, E. R.

Hydraulic Model Studies of Recessed Curb Inlets and Bridge Drains, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p528-

Holliday, Mark J.

Ethical Responsibilities of Engineering Profession, El July 94, p270-272

Hollinger, James S.

Enabler Chassis Features and Mobiltiy Analysis, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p210-219

Hollingsworth, Thomas R.

see Yow, M. Gene, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p337-347

Holly, Forrest M., Jr.

Expert Analysis in Regulated Irrigation Canal Modelling, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with John P. Parrish, p92-96

see Meselhe, Ehab A., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

p512-516

see Mohammad, Ejaz, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), Holm, J. David

Perspectives on Water Quality Regulation, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p145-154

Holm, Judith

Raising Students' and Educators' Awareness of Radioac-tive Materials Transport Through Creative Classroom Materials and Exhibits, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Cheryl Sandoz, Jennifer Dickenson, Anne Marie Smith and Jan Cortelyou Lee, p213-216

Training for Effective Public Outreach: A Model for Transportation Risk Communication Training, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Kathie Reed

and Dick Tardif, p83-87

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Holm, Thomas A.

see Bremner, Theodore W., (Advances in Cement and Con-crete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p37-51

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see Foster, D. L., (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p712-726

Holme, Howard

Improvements to the Clean Water Act and Related Statutes, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p233-257 National Water Resources Regulation: Where is the Envi-

ronmental Pendulum Now?, 1994, 0-7844-0045-8,

275pp.

Preface and Executive Summary, (National Water Re-sources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p1-14

see Whipple, William, Jr., (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p258-271

Holmes, William T.
see Rai, Durgesh C., (Structures Congress XII, N. C.
Baker, ed. and Barry J. Loodno, ed., 1994), p809-

Holmlin, Rex M.

Debris Removal Operations Following Hurricane Andrew, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p539-547

Holnbeck, Stephen R. see Parrett, Charles, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994). p870-874

Holonich, Joseph J. see Delligatti, Mark S., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1597-1603

Holsen, Thomas M.

see Guddati, Subbarao L., (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p241-248

Breakwater Design and Construction Harbor Centre Marina Sheboygan, Wisconsin, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), with Dave Anglin, Dave Sanders and Larry Ryan, p292-299

Holte, Lars E.

see Schmidt, Richard J., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1415-1420

Holthuijsen, L. H.

A Spectral Wave Model for the Coastal Zone, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), with N. Booij and R. C. Ris, p630-641

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Kraus, ed., 1994), p794-808

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The Importance of Hurricane Risk Assessment in Housing and Improved Design and Building Practice Therein, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), with Patrick Drakes and David Prevatt, p684-695

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Water Policy and Management: Solving the Problems in Southern New Jersey, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p497-500

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Wind Tunnel Testing of High-Rise Residential Buildings in Hurricane Areas, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), with Mark A. Hunter, Mark Mosbat and Sanjeev M. Shah, p663-673

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Phoenix Central Library: Reading Room Roof, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p38-

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Concrete Shells Today, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p820-836

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Thoughts of Reservoir Management Studies, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Kenneth W. Kirby and Jay R. Lund, p238-241

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Effectiveness of Storm Shutters in Hurricane Damage Prerecuveness of storm Shutters in Furricane Damage Prevention, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), with Camille A. Issa, Ajay Shanker and Paul Gencorelli, p486-495

Using Pen Computers in Post-Disaster Insurance Claim Settlements, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2145-2148

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Criteria for Acceptable Wind-Induced Motions, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p642-647

Wind Action on Highrise Structures: Codes - Wind Tunnel - Reality, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p430-445

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The Tatara Bridge - World's Longest Cable-Stayed Span, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Takeo Endo, p677-682

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Fiber-Glass Composite Aircraft Pad for Crop Dusting, (In-frastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Vijayakumar Ranganathan and Terry Gross, p743-750

Graphite Prestressed Concrete Deck for Navy Facilities, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Vijayakumar Ran-

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nstream Flow Policy: An Alternative to Minimum Flowby, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p222-225

Instream Flow Studies: Susquehanna Basin and Pennsylva-nia, (Water Policy and Management: Solving the Prob-lems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p145-148

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Laser Generation and Detection of Ultrasound in Concrete, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1328-1333

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A Chance Constrained Model Using Kinematic Wave Routing for Stormwater Infrastructure Rehabilitation, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), with Miguel A. Medina, Jr., p39-54

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How Many Observation Wells Does it Take to Find a Groundwater Contamination Plume?, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Steven M. Gorelick, p197-199

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Macroelement Model for Shear Wall Analysis, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Sashi K. Kunnath, p1505-1512

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Why Design Storm Methods Have Become Unethical, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1203-1207

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Load-Deformation Curves of Normal and High Strength Concrete for a Range of Height to Diameter Ratios, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with S. P. Shah, p716-724

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disc. (of Three-Dimensional Seismic Analysis of La Villita Dam, by A.-W. Elgamal, GT Dec. 92, p1937-1958), GT June 94, p1096-1098

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Evolution of Beneficial Uses of Dredged Materials for Over 200 Million Cubic Yards of Dredged Material in Galveston Bay, Texas Part II - Framework & Approach, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p843-846

Janssens, Dominique P.

The Canadian Approach in the Design of Wood Structures: Conversion to Limit States Design, (Structures Congress XII. N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p514-519

Janzon, Hans A.

Tunnel Boring Machine for Nuclear Waste Repository Research Project, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p403-410

Jäppelt, U.

Stability Analysis of Stiffened Plates and Shells, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with H. Rothert, p917-926

see Papacostas, C. S., (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p607-

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see Jeyapalan, Jey K., (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p239-260

Jardine, L. J.

see Merkhofer, M. W., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1739-1744

Jardine, R. J.

see Lehane, B. M., GT Jan. 93, p19-35

Jarrett, Robert D.

Historic-Flood Evaluation and Research Needs in Mountainous Areas, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p875-

Jary, Roland S.

Pavement Renovation with HPI Electrochemical Method, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p643-653

Jaselskis, Edward J.

Robotic Opportunities for Hazardous-Waste Cleanup, with Mary Rose Anderson, EE Mar./Apr. 94, p359-378 see Severson, Gordon D., CO June 94, p405-420

Jaselskis, Edward W.

see Tilford, Kelly R., (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p329-337

Javid, Massoud

Optimal Supply ptimal Supply of Parking at Airports, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), with Prianka N. Seneviratne, p174-182

Jawed, K.

see von der Heydt, L., (Water Policy and Managemeni: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p5-8

Jawed, Mohammad

disc. (of Degradation of Acetate, Propionate, and Butyrate under Shock Temperature, by Mustafa Öztürk, EE Mar./Apr. 93, p321-331) with Udaya Bhaskar, EE Nov./Dec. 94, p1654-1656

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Jayaraman, R.

see Rao, A. S. Prasada, ST Sept. 94, p2784-2792

Jayyousi, Enan F.

Natural and Dam Break Flood Routing in Mountain Rivers, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with David S. Bowles and Roland W. Jeppson, p371-375

Jazayeri, Farid

see Jazayeri, Jason M., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1438-1445

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Application of Pen Computing to Construction Inspection, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Farid Jazayeri and Katherine Litchfield, p1438-1445

Using Computer Programs to Develop As-Built Schedules, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p191-196

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Jednachowski, Ryszard

see Zeidler, Ryszard B., (disc), WW Sept./Oct. 92, p534-

Quality of Map Data in Geographic Information Systems, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p221-224

Jeng, Kathlie Suyn

Groundwater Management and Systems Operations Optimization Utilizing Supply, Well Reliability, and Demand Distribution as Decision-Making Criteria, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Jerry Rogers, p77-80

Jenkins, Christopher

see Kjerengtroen, Lidvin, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p483-490

Jenkins, David V.

see Hachey, Joseph E., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p502-512

Jenkins, Lyle M.

Global Environmental Change: Geoengineering Technology, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p524-531

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disc. (of Model for Optimal Design of Reinforced Concrete Beam, by B. K. Chakrabarty, ST Nov. 92, p3238-3242), ST Mar. 94, p1046-1047

Jenkins-Smith, Hank C.

Analyzing Mass Perceptions of Nuclear Politics: Puzzling Over Trust, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Com tee, 1994), with Deborah A. Pratt and Gilbert W. Bassett, Jr., p131-135

Jennings, Aaron A.

Superfund Decision Analysis in Presence of Uncertainty, with Neel Mehta and Sumeet Mohan, EE Sept./Oct. 94, p1132-1150

Jennings, Marshall

see Whipple, William, Jr., (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p258-271

Jenq, Yeou-Shang

Control of Random Crack Formation in Portland Cement Concrete Pavements, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Sang-Chel Kim, p972-977

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see Sumer, B. M., WW May/June 94, p233-250

Jensen, Christian A.

Effective Project Planning Techniques, CE Feb. 94, p66-67

Jensen, Curtis

disc. (of Deformation of Fill Slopes Caused by Wetting, (Stability and Performance of Slopes and Embankments II, Raymond B. Seed, ed. and Ross W. Boulanger, ed., 1992), by Iraj Noorany, Joel A. Sweet and Ian M. Smith, p1244-1257) with Adel Kasim, GT July 94, p1270-1273

Jensen, David W.

Mechanics of Curved Fiber Bundles in Composites, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with Suresh P. Pai, Timothy R. Pickenheim and Colleen M. McCarty, p276-286

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see Bonner, Vernon, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p376-380

Jensen, Mark R.

WATSUP: A Simulation Model for Water Supply Cost and Reliability, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Jay R. Lund, p806-809

Jensen, R. E.

Evaluation of a Third-Generation Wave Model for the U.S. Atlantic Coast, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), with S. H. Houston, C. L. Vincent and M. D. Powell, p433-447

Jensen, Robert E., Ph.D.

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see Signell, Richard P., (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p578-590

see Knoke, John R., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2104-2111

Jeong, Dong Kug

Real-Time Flood Forecasting Using Adaptive Estimation, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Ben Chie Yen, p341-345

Jeong, Sangseom

Nonlinear Three Dimensional Analysis of Downdrag on Pile Groups, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with Jean-Louis Briaud, p1366-1384

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see Griffis, Fletcher H., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1335-1354

Jewell, Leonard

Immiscible Organic Liquid Recovery Using Unconfined Membranes, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with Michael J. Semmens, p90-97

Jewell, R. J.

see Marsh, J. G., TE July/Aug. 94, p617-632

Jewell, W. J.

see Chu, K. H., EE Jan./Feb. 94, p58-71

Jeyapalan, Jey K.

Failure of Large Diameter High Density Polyethylene Sewer Pipe a Case in Point, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), with Joe A. Conner, p356-371

New Modulus of Soil Reaction - E' Values for Buried Thermoplastic Pipe Design, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), with Peggy A. Jaramillo, p239-260

Jha, Akhilesh Kumar

Modeling Unsteady Open-Channel Flows-Modification to Beam and Warming Scheme, with Juichiro Akiyama and Masaru Ura, HY Apr. 94, p461-476

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Energy Method for Nonlinear Random Vibrations in MDF Systems, EM Apr. 94, p910-916

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One- and Two-Dimensional Analysis of Flow in Hotophia Creek, MS, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Carlos V. Alonso, p589-594

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Regularized Method in Limit Analysis, EM June 94, p1179-1197

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Hollow Spheres Subjected to Sustained and Variable Loads, EM June 94, p1343-1368

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Study of Two-Surface Plasticity Theory, EM Oct. 94, p2179-2200

Jiang, Z.

Computer simulation of pulsed pumping for remediation under mass transfer limited conditions, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with W. P. Ball, p352-359

Behavior of RC Beams under Sustained Load, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Shen Jumin, p239-244

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see Heyliger, P. R., EM May 93, p1062-1077

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see S.-Arcilla, A., (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p488-502

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Water-Level Control in Hydropower Plants, with M. Hanif Chaudhry, EY Dec. 92, p180-193 disc: P. Veerabhadra Rao, EY Aug. 94, p98-100

clo: EY Aug. 94, p100-101

Jin. L.

Seismic Retrofit of Existing Reinforced Concrete Columns by Glass-Fiber Composites, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with H. Saadatmanesh and M. R. Ehsani, p753-

Jin, Myung S.

Seasonal Variation of Resilient Modulus of Subgrade Soils, with K. Wayne Lee and William D. Kovacs, TE July/ Aug. 94, p603-616

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Localization Analysis of Nonlocal Model Based on Crack Interactions, with Zdeněk P. Bažant, EM July 94, p1521-1542

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Jirsa, J. O.

see Aboutaha, R. S., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1502-1507

Jirsa, James

see Kahhaleh, Khaled, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p8-15

Jitno, Hendra

A Procedure for Predicting Seismic Deformation of Earth Structures, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with Peter M. Byrne, p711-725

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see Di Giammarco, P., (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p171-185

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see Yoo, Ho-Sik, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p585-592

Johns, Bjorn L.

Use of GPS for Tethered Satellite Position Determination, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with George W. Morgenthaler, p64-79

Johnsen, Lawrence F.

"Dynamic Compaction Used as a Winter Construction Expedient", (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), with Christopher Tonzi, p68-79

Johnson, A.

see Fowler, Malinda, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p132-135

Johnson, B. H.

Analysis of Dredged Material Placed in Open Water, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with N. W. Scheffner, A. M. Teeter, E. B. Hands and H. R. Mor-

Identification of A Field Data Collection Program in Dela ware Bay, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with K. W. Kim, T. L. Fagerberg and H. A. Benson, p900-904

W. Kim, I. L. Fagerberg and H. A. Benson, p900-904 see Kim, K. W., (Estuarine and Coastal Modeling III, Mal-colm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swan-son, ed., 1994), p29-41 see Kim, K. W., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

p574-578

see Roberts, Philip J. W., (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1192-1200

Johnson, Billy H.
see Randall, Robert E., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1295-1304

see Thevenot, Michelle M., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p180-189

Johnson, Charles N.

The TMA Wave-Energy Constraint and Cohesive Shore-Profile Shapes, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p236-250

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see Clark, Robert M., EE July/Aug. 94, p875-887

Johnson, Donn M.

The Economic Cost of Stocking Catchable Rainbow Trout, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Richard G. Walsh, p549-552

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The Performance of Unconfined Hollow Fiber Membranes as Pipe Flow and Mixed Flow Aerators, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with Michael J. Semmens, p106-113

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see Brøker, Ida, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p103-113

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Johnson, Lyle

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see Pessiki, Stephen, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1340-

Johnson, Matthew R.

see Hertlein, Bernard H., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1119-1126

Johnson, P. E.

Johnson, F. E.The Tracking of High Level Waste Shipments—Transcom System, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with D. S. Joy, R. B. Pope, T. M. Thomas and P. B. Lester, p1242-1248

Johnson, Paul E.

see Joy, David S., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1263-1269

n, Paul W.

see Bakall, Ergun, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994),

Johnson, Peggy A.

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Johnson, Peter T.

Earning Empowerment From Stakeholders, (High Level oactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p258-262

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Johnson, Robert A.

see Temus, Charles J., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p452-456

Johnson, Robert L.

Nuclear Regulatory Commission Staff Approaches to Im-proving the Integration of Regulatory Guidance Documents and Prelicensing Reviews, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1604-1608

Johnson, Stewart W.

see Chua, Koon Meng, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p867-877

see Chua, Koon Meng, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p916-932

Johnson, Terry L.

Modeling Full-Scale Diffused Aeration Systems, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with Ross E. McKinney, p702-709

see Abt, Steven R., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p467-471

see Abt, Steven R., EY Aug. 94, p51-66

Johnson, Wayne G.

see Gerardi, Anthony G., (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p30-41

Johnson, Wesley R.

The Bladensbug Marina Revitalization Project, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), with Kevin H. Deis, p439-448

Johnson, William K.

Opportunities, Constraints and Change in Reservoir Management, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with David T. Ford and Ralph A. Wurbs, p864-867

Susceptibility of Reservoirs to Drought Using Palmer Index, with Roger W. Kohne, WR May/June 93, p367-387

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Modeling Horizontal Round Buoyant Jets in Shallow Water, with C. R. Phillips and R. E. Volker, HY Jan. 94, p41-59

Johnston, David W.

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Johnston, Ian W.

Movement of Foundations on Rock, (Vertical and Horizontal Deformations of Foundations and Embankments, Yeung, ed. and Guy Y. Félio, ed., 1994), p1703-1717

Johnston, Robert A.

Systems-Level Evaluation of Automated Urban Freeways, with Raju Ceerla, TE Nov./Dec. 94, p877-896

Joint Committee of the American Society of Civil Engineers, American Congress on Surveying and Map-ping, and American Society for Photogrammetry and Remote Sensing

Glossary of Mapping Science, ISBN: 1-57083-011-8, 1994, 0-7844-0050-4, 581pp.

Joint Task Force of the Water Environment Federation and the American Society of Civil Engineers, (B. Jay Schrock, chmn.)

Existing Sewer Evaluation and Rehabilitation, Second Edition. Second edition (M&R No. 62), 1994, 0-7844-0049-0, 270pp.

Jolicoeur, Claude

Analytical Solution for Bending of Coaxial Orthotropic Cylinders, with Alain Cardou, EM Dec. 94, p2556-2574

Jolly, S. D.

Design and Construction of Shielded Lunar Outpost, with J. Happel and S. Sture, AS Oct. 94, p417-434

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Construction Problem Solving in a Cooperative Distributed Agent Environment, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Mike Riley, p79-87

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Jones, D. P.

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see Mayes, Ronald L., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1179-1186

Jones, Dick L.

disc. (of Geosynthetics Conquer the Landfill Law, by Luther Derian, Edward Kavazanjian, Jr., Michael S. Snow and Kelly M. Gharios, CE Dec. 93, p50-53), CE Apr. 94,

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see Landers, Mark N., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p41-45

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see Whipple, William, Jr., (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p258-271

Jones, Jonathan E.

Purpose and Perspective for the Conference: "National Water Resources Regulation - Where is the Pendulum Now?", (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p15-19

disc. (of Jury Verdict: Frequency versus Risk-Based Culvert Design, by Gary L. Lewis, WR Mar./Apr. 92, p166-184), WR Nov./Dec. 94, p994

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see Edwards, Kenneth B., EE Mar./Apr. 94, p329-347

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Multi-mode Aerodynamic Analysis of Long-Span Bridges, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Anurag, Jain and Robert H. Scanlan, p894-899

see Cross, W. Bradford, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1569

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see Sarkar, Partha P., EM Aug. 94, p1718-1742

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Jones, Sammy L.

Environmental Hardening of a Mobile-Manipulator System for Nuclear Environments, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), with Timothy Cable, James S. Tulenko, Stoyan Toshkov and Fred R. Sias, Jr., p296-303

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Testing of Hollow Clay Tile Masonry Prisms, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with M. B. Butala, p1094-1099

Jones, W. Dale

see Henderson, R. Craig, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p803-

Jones, William K.

Influence of Sikes Cut on Apalachicola Bay, FL; A Preliminary Analysis from a Three-Dimensional Perspective, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), with Boris Galperin, Robert H. Weisberg and T. S. Wu, p351-365

Jones-Lee, Anne

Achieving Adequate BMP's for Stormwater Quality Management, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with G. Fred Lee, p524-531

see Lee, G. Fred, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p121-130

see Lee, G. Fred, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p516-523

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Managing the Russian River Aggregate Resources, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p838-841

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Technology Development and Transfer in Environmental Management, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Alan Karnovitz and Martin Yarbrough, p314-7-314-12

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see Judd, Lee, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p513-516

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see Thevanayagam, S., (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p90-105

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Study on Structural Characteristics of Air-Inflated Beam Structures, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with Kazuo Ishii, p742-751

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Possibilities and Problems of Latticed Structures, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p350-376

Structural Tests on the "Suspen-Dome" System, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with Masaru Abe, Tatsuo Hatabo, Ikuo Tatemichi, Satoshi Fujiwara, Hiroaki Matsufuji, Hiroyuki Yoshida and Yoshimichi Anma, p383-392

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Exemplary Plans of a Fisharina in Japan, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), with Hideki Hata and Yasuhiro Yoshizuka, p211-221

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Utilization of Liquid Carbon Dioxide for Planetary Exploration, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with Ei-ichi Mizuno, Kazuya Takeda and Masaki Kojima, p1070-1076

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The Structural History of the Jacob Bachmann Tavern, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Kristina Lammi, p1570

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Human Extender: A Material Handling System, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p37-43

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An Improved Design of Excluding Sediment into River Intake Structures, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Sue-Jen Wu and Che-Yuan Huang, pl 193-1197

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A Probability Based Approach to the Design and Operation of Soil Vapor Extraction Systems, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with William F. McTernan, p564-571

Keen, Timothy R.

Coastal Circulation and Sedimentation During Severe Storms, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), with Scott M. Glenn and Rudy L. Slingerland, p.279-293

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Hurricane Andrew - Structural Performance of Buildings in South Florida, with John D. Rose, CF Aug. 94, p178-191

Performance of Plywood and OSB Sheathing During Hurricanes Andrew and Iniki, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p313-329

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see Latimer, Eduardo A., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p335-338

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Coupled Lake Erie Air-Sea, Storm Resolving Forecasts and Predictions, the Viento Project, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), with Chieh-Cheng J. Yen, Keith W. Bedford, Jay S. Hobgood and David J. Schwab, p202-215

Short-Term Forecasts for Lake Erie, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Chieh-Cheng J. Yen, Jay S. Hobgood, David J. Schwab and Keith W. Bedford, p227-231

see Yen, Chieh-Cheng J., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p202-206

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Emergency Repairs for Storrow Drive Tunnel, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1103-1110

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Overview - Electrical Substation Structures Design Guide, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p597-600

see Do, Thien T., (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p48-59

Kendall, David

Five Year Implementation Retrospective on the Puget Sound Dredged Disposal Analysis Program (PSDDA), (Dredging '94, E. Clark McNair, Jr., ed., 1994), with David Fox, Stephanie Stirling, Maria Peeler, Gene Reve-las, Phillip Hertzog, Justine Barton and John Malek, p1527-1553

Kenna, B. Thomas

Demonstration of Equipment for Dredging Contaminated Sediments at Buffalo River, Buffalo, New York, (*Dredg-*ing '94, E. Clark McNair, Jr., ed., 1994), with Daniel E. Averett, Paul A. Zappi and Stephen M. Yaksich, p885-895

Pilot-Scale Demonstrations of Thermal Desorption for the Treatment of Contaminated River Sediment, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with David Conboy, Judith Leithner, Daniel Averett and Stephen Yaksich, p474-483

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Steel Compression Member Design in the 1994 Canadian Standard, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p221-226

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Alternative Habitat Concepts for the First Lunar Outpost, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with Michael Roberts, p1020-1035

Kennedy, Kriss J.

Habitat Configuration Evaluation Criteria for Moon/Mars, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p979-987

Kennedy, Mark

Reducing Wastewater Sludge Pathogens Using Heat Treatment, (Critical Issues in Water and Wastewater Treat-ment, Oseph N. Ryan, ed. and Mare Edwards, ed., 1994), with Kondapalli Reddy and Lyle Johnson, p281-288

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Verification of the AECL Total System Performance Mod-els, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Steve Oliver, p2437-2441

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Breakout Session 4C: Public Participation, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), with Marilyn Skolnick and Kathleen Stein Hudson, p154

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A Numerical Study of Convection Heat Transfer Within Relative Waste Management, High Level Radioactive Waste Program Committee, 1994), with L. Luo, p780-

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see Fanos, Alfy M., (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p189-203

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Research of Strength and Deformations with Long-time Loading and the Use of Glassfiber Reinforced Concrete in Shells, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with M. M. Lachinov, p340-349

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Using the Weir Back as an Energy Dissipator, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p436-441

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Compressive Strength of Masonry Prisms, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Ahmed E. Magzoub, p1100-1105

The World's Longest Cable-stayed Foot-Bridge Using Fiber Reinforced Plastics, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Maher K. Tadros, p207-214

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Optimization of Curing of Silica Fume Concrete, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Michael E. Ayers, p820-

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Design and Construction Deficiencies and Building Code Adherence, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), with Wimal Suaris, p133-146

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Hydraulic Properties of Surface Runoff on Ash-Mixed Concrete Pavement, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Shahriar Afshari, p205-209

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Large Deformation Analysis of Lattice Truss Structures Including Hysteretic Material Behavior, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with George E. Blandford and Shien T. Wang, p499-508

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Rebuilding the Former Soviet States: Perspectives on the Construction Market, WP Spring 94, p32-36

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A Framework for Collaborative Distributed Facility Engineering, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Michael R. Genesereth and Paul M. Teicholz, p1489-1496

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Application of the FESWMS-2DH Software to Solve the Navigation Problem at EL-Menya Bridge in Egypt, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Ahmed Fahmey and Mohamed Gasser, p1244-1250

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Improving Dynamic Finite Element Models Using Test Data, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with D. E. Veley, p18-26

Optimization of Controlled Structures: Using H., Theory, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), with D. E. Veley, p266-275

Computing in Civil Engineering, 2 vols., 1994, 0-7844-0026-1, 2275pp.

Khrushchov, D. P.

Concept and Programme "Radioactive" Waste Disposal in Geological Formations of Ukraine, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with M. P. Umanets and Eu. A. Yakovlev, p2305-2309

Methodology of Scientific Investigations for Radioactive Waste Disposal in Geological Formations of Ukraine, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with O. M. Kharitonov and Eu. A. Yakovlev, p1514-1520

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Flow Capacity of Rehabilitated Sanitary Sewers, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), with Karl E. Kienow and Paul E. Kienow, p28-42

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Kilgore, Roger T.

Integration of Water Resource Models and GIS for Water Resource Management, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Joseph S. Krolak and Michael Walsh, p37-40

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The Context-Oriented Model: An improved Modeling Approach for Representing and Processing Design Standards, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with James H. Garrett, Jr., Thomas J. Chmielenski and Kent A. Reed, p145-152

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see Flora, Edna M. C. V., (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p305-312

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Prediction of Low Level Vibration Induced Settlement, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with Sergey Drabkin, Anatoly Rokhvarger and Debra Laefer, p806-817

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Optimal Rehabilitation Model for Water-Distribution Systems, with Larry W. Mays, WR Sept./Oct. 94, p674-692

Kim, K. W.

Assessing the Impact of Channel Deepening in Delaware Bay Through Numerical Modeling, (If, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), with B. H. Johnson and J. Gebert, p.29-41

Verification of a Three-Dimensional Model of Delaware Bay, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with B. H. Johnson

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Statistical Considerations on Large-Scale Geomechanics Test Design For Nuclear Waste Repository Characterization, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Hang Gao, p1922-1929

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An Object-Oriented Scheduling Data Acquisition Model Using a Hybrid Expert System, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Calin M. Popescu and Gary D. Hamilton, p356-361

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see Liu, L. Y., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p614-621

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Comparisons of Directional Wave Analysis Methods, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), with Lihwa Lin and Hsiang Wang, p554-568

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see Bejczy, Antal K., (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p1-9

Kim, Y. R.

Rheological Characterization of Asphaltic Mixtures Under Repetitive Loading, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Y. C. Lee, p?96-803

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Modeling of Deep Water Outfall Plumes in the East Australian Coastal Ocean, (Estuarine and Coastal Modeling III. Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), with William L. Peirson and Bruce A. Cathers, p71-85

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Advances in the Modelling of Long Span Bridges for Wind Effects, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Alan G. Davenport, p875-880

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Climate Change Impacts on Boston's Water Supply, (Water Policy and Management: Solving the Problems, (Water Fortier, and Management. Soving the Fronteins, Darriell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Neil M. Fennessey, p489-492 see Fennessey, Neil M., WR Jan./Feb. 94, p48-69 see Gutowski, William J., WR Mar./Apr. 94, p176-185

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Behavior of Tall Frame Combining Rigid and Semi-Rigid Connections, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Wai-Fah Chen, Yoshiaki Goto and Ken-ichi G. Matsuoka, p1185-1190

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Balancing Recreational, Economic Development and Envi-ronmental Protection Goals for New Recreational Boating Facilities in the State of Wisconsin, U.S.A., (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), with James Rooney and Larry Freidig, p7-19

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An Overview of A.S.C.E. Manual 50 "Planning and Design Guidelines for Small Craft Harbors", (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p196-200

see Doyle, Robert, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p552-561

see Flug, Marshall, ed., Marinas, Parks and Recreation Developments

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Recent Developments in the Robotic All Terrain Lunar Exploration Rover (RATLER) Program, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p202-209

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The MOUSE Uncertainty Analysis System, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p372-

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DETMOD: A Desktop Estuarine Transport MODel, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Bryan R. Pearce, p1032-1038

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see Chang, T. J., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p630-639

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Partnering in Environmental Restoration: The Coastal America Model, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p449-452

Linking Linear Greenways To Communities, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p514-519

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Assessment and Upgrade of an Older Transmission Line, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Alain H. Peyrot, p607-612

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Study of Friction Factors in the Upper Reaches of the Rio Grande, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with

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Boundary Shear in the Vicinity of River Banks, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Shuyou Cao, p954-958

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Analysis of Composite Panels Using Newton's Method, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p147-155

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Long Term Stability of Natural Glasses, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Lumír Nachmilner, p1066-1068

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Water Injection Dredging in the United States, (*Dredging* '94, E. Clark McNair, Jr., ed., 1994), with Daniel J. Krumholz and James E. Clausner, p847-856

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A Feature Based Path Planning System for Robotic Stenciling of Roadway Markings, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), with B. Ravani, p52-60

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Application of the Phase Change Process to One-Dimensinal Consolidation Behavior of Peat, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p677-687

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Lateral Foundation Deformations for a Marine Test Fill, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y.

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Effects of SPT Equipment and Procedures on the Design of Shallow Foundations on Sand, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p121-131

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Chicago River Navigation Study, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), with Nicholas Pansic and Vedat Demirel, p321-332

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Distributed Flexibility Models for Nonlinear Analysis of RC Structures, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p145-154

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SemiActive Structural Control: A Low Cost Fix for An Infrastructure at Risk, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with H. Wu, Liu, R.L. Sack, A. Ebrahimpour and W. N. Patten, p387-392

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Spread Footing Prediction Event, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), with

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Theoretical study of unstable waves in the rapids of the river, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1265-1269

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A Stochastic Framework for the Modeling of Failures in Urban Drainage Systems due to Microscale Effects, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), with L. Lanza and U. Parodi, p197-208

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Integration of Water Quantity and Quality in River Basin Network Flow Modeling, (Water Policy and Manage-ment: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Darrell G. Fontane and Tewai Dai, p61-64

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Fortification of MMOC Models for Steep-Channel Flows, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Der-Liang Young and Jen-Ter Chang, p1290-1294

Multicomponent-Flow Analyses by Multimode Method of Characteristics, HY Mar. 94, p378-395

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see Schaffranek, Raymond W., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p522-527

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see Zhao, D. H., HY July 94, p863-883

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High-Resolution Upwind Schemes for Solving Mass Transport Equation, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Hsieh Wen Shen and Dihua Zhao, p497-501 see Zhao, Dihua, (Hydraulic Engineering '94, George V.

Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p135-139

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Impulse Effect on Redundancy of a Tied-Arch Bridge, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p712-719

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see Pelletier, J-P., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1050-1060

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Deductive Databases in Engineering, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p806-813

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Hyper-Geodesic Structures: Excerpts from a Visual Catalog, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1053-1064

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Integrated Modelling of Near Field and Engineered Barrier System Processes, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with James Gansemer, p1195-1201

see Gansemer, James D., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2197-2206

Lampietti, Francois M.I.

World Bank Update: In Deep Water, WP Special issue 94,

Lamport, William

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see Fox, Patrick J., GT Aug. 92, p1256-1263

Structural Failure and Quality Assurance of Space Frames, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p123-132

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see Berardi, Riccardo, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p640-651

Landers, Mark N.

Brief Summary of National Bridge Scour Data Base, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with J. Sterling Jones and Roy E. Trent, p41-45

see Mueller, David S., (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p104-113

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New Applications and Practices for Beneficial Uses of Dredged Material, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), with J. Fowler and H. H. Allen, p526-536

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Landva, A. O..
Long Term Performance of Raft and Footing Foundations Above Clayey Silt, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with A. J. Valsangkar and Z. Wroblewicz, p860-874

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Obevelopment Length of Uncoated Prestressing Strand, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p624-629

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An Object-Oriented Approach to PC Finite-Element Solutions, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1236-1243

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Gravity and Megnetic Investigations of Yucca Wash, Southwest Nevada, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with D. A. Ponce, p2272-2278

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see Lewis, Paul J., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p451-461

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Case Study of Development of Distance-Learning Course, with T. Bilham, R. Fellows and R. Newcombe, EI Oct. 94, p333-340

Development of a Long-Term Dredged Material Management Plan Chincoteague, Virginia, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p359-367

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Interdiscipline Design Coordination Facilitated by CADD, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1983-1989

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see Shelor, Dwight, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1609-1613

Lansey, Kevin E.

Integration of Reliability, Uncertainty and Optimization in Hydraulics Systems: Classification of Problem Types, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p262-265

Integration of Reliability, Uncertainty and Optimization in Hydraulics Systems: Structural Reliability, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p266-269

Optimal Pump Operations Considering Pump Switches, with Kofi Awumah, WR Jan./Feb. 94, p17-35

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see Espey, William H., Jr., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p175-181

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Hurricane Andrew - The Ultimate Curtain Wall Test, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p424-429

Larkin, Michael D.

Graphical Network Model Simplifies Water Analysis, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p296-317

see Morsi, Ed (Ahmed), (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p751-757

see Morsi, Ed (Ahmed), (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p991-1000

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Innovative Instrumentation for a Physical Model of River Ice Transport, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), with Jon E. Zufelt and Randy D. Crissman, p259-267

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see Fafitis, Apostolos, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p399-

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Cross-Shore Sand Transport Under Random Waves at SU-PERTANK Examined at Mesoscale, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with Nicholas C. Kraus, p204-219

Decay of Random Waves on Non-Monotonic Profiles, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p503-

see Smith, Jane McKee, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p798-812

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Nighttime Cement Concrete Pavement Replacement Seattle-Tacoma International Airport, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), with John Rothnie, p92-101

Lashley, Douglas L. A Wetland Mitigation Bank - An Economic Model, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p352-359

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Air Entrapment and Water Infiltration in Two-Layered Soil Column, with S. N. Prasad and O. J. Helweg, IR Sept./ Oct. 94, p871-891

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Effects of Lateral Heading Flow Steadiness on Lateral Spillage, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Michael R. Petersen and Andrew A. Keller, p115-118

Water Conservation and Delivery Flexibility in the Imperi-al Irrigation District Through Lateral Interceptor Systems, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Robert W. Charley, Todd Hunziker, Andrew A. Keller and Doug Welch, p335-338

Latimer, Richard W.

EPA's Environmental Monitoring and Assessment Pro-gram: Availability of Broad-Scale Environmental Data gram: Availability of Broad-Scale Environmental Data and Opportunities for Use in Environmental Modeling Applications, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), with John F. Paul and Jeffrey S. Rosen, p509-521

see Tressler, R., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p750-753

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see Harberg, Mark, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p742-745

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The Role of SEAOH in the Post-Iniki Rebuilding and Recovery Effort, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), with Michael K. H. Yee, p278-283

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Mixed-Use Business Park Developments in Space: A Real-Estate Paradigm, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with Joseph P. Hopkins, Hugh M. Kelso, Brent Sherwood and Dana G. Andrews, p1471-1481

Lauer, William C.

Denver's Direct Potable Water Reuse Demonstration Project, (Water Policy and Management: Solving the Prob-lems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p657-660

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U-234/U-238 Ratio: Qualitative Estimate of Groundwater Flow in Rocky Flats Monitoring Wells, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2702-2708

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Laura, Faircio A. A.
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Gisc. (of Stability of Skew Mindlin Plates under Isotropic In-Plane Pressure, by C. M. Wang, S. Kitipornchai, Y. Xiang and K. M. Liew, EM Feb. 93, p393-401) with Victor H. Cortinez, EM Oct. 94, p2245-2246

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see Hadjerioua, Boualem, (Fundamentals and Advance-ments in Hydraulic Measurements and Experimenta-

tion, Clifford A. Pugh, ed., 1994), p289-295

see Hadjerioua, Boualem, (Hydraulic Engineering '94,
George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p416-420

see Hadjerioua, Boualem, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p989-993

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Aesthetic Issues in Timber Bridges, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1268-1273

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Control of Settlement and Uplift of Structures Using Short Aggregate Piers, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), with Nathaniel S. Fox and Richard L. Handy, p121-132

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Settlement of Structures Supported on Marginal or Inadequate Soils Stiffened With Short Aggregate Piers, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with Nathaniel S. Fox, p962-974

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Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p409-418

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Deformations in Sand Layer During Pile Driving, (Vertical and Horizontal Deformations of Foundations and Em-bankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p257-268

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see Gross, J. L., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1472-1477

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Redefining the Roles Insurers and Engineers Play in Hurricane Preparedness and Mitigation, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p1-9

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New Program for the Marine Observation and Prediction Center of the Central Weather Bureau, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p124-134

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Mixing of Thermal Discharges at Low Froude Numbers, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Patrick J. Ryan,

Lee, Deborah H.

Storm and Entrainment Effects on Tributary Sediment Loads, with Keith W. Bedford and Chieh-Cheng J. Yen, HY Jan. 94, p81-103

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Contaminated Dredged Sediment Disposal Criteria, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with Anne Jones-Lee, p121-130

Evaluation and Management of Non-Point Source Pollutants in the Lake Tahoe Watershed, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with Anne Jones-Lee, p516-523

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General Structure Representation for Neural Networks, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), with Mohamed F. Elkordy, p47-56

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Tuvel, ed., 1994), p57-60

see Shim, S. B., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p303-306

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On Measurements of Particle Spinning Motion, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), with In-Song Hsu, p149-158

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see Biel, Timothy D., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p351-358

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Kinematics of Wave Overtopping on Marine Structure, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), with F. Zhuang and C. Chang, p821-834

Coupling Translation and Rocking Motions, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with J. A. Bohinsky, p61-66

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Thermal Stresses in Piezoelectric Materials: A Boundary Integral Formulation, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with L. Z. Jiang, p336-347

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Fire Resistance of Circular Steel Columns Fined with Bar-Reinforced Concrete, ST May 94, p1489-1509 Synopsis of a Manual on Structural Fire Protection, (Struc-tures Congress XII, N. C. Baker, ed. and Barry J. Lood-no, ed., 1994), with E. L. Schaffer, p1002-1005

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West Breakwater Maintenance, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), with Fernando A.

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Soil-Structure Interaction During Mining Induced Ground Movements, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with Eric C. Drumm, Richard M. Bennett, Larry Powell and Ted Triplett,

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Emissions, Ambient Concentrations, and Potential Health Hazards of VOCs from Wastewater Treatment, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with Lynn M. Hildemann, p580-584

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Downdrag on Piles: Review and Recent Experimentation, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1805-1826

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see Draffin, Cyril W., Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p13-17

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Applying Multimedia Technology to Project Control, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with A. L. Stumpf and S. S. Kim, p608-613

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Integrated Research for Civil Infrastructure Systems: A Future Challenge, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), with K. P. Chong and M. P. Singh,

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Seismic Evaluation of the Tied-arch Bridge Across the Mississippi River on I-40, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Roy A. Imbsen, Richard J. LeBeau, Farid S. Nobari and Lelio H. Mejia, p355-360

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The National Spatial Data Infrastructure and its Usefulness to the Dredging Community, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p516-525

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Design of Dredge Containment and Dewatering Facilities, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with Edward A. Dudek, Jr. and Michael R. Palermo, p1230-1239

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The Small Reclamation Projects Loan Program A Development Tool For The 90's, (Water Policy and Manage ment: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p119-122

Understanding the Uses of History in Water Resources Planning and Management, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p505-508

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Acoustic-Doppler Velocimeter (ADV) for Laboratory Use, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), with Ramon Cabrera and Nicholas C. Kraus, p351-365

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Overview of the Spanish High Level Radioactive Waste Programme, (High Level Radioactive Waste Manage-ment, High Level Radioactive Waste Program Committee, 1994), with A. R. Beceiro, p2284-2290

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Feasibility of Using MPCs for DOE Research and Production Fuel, (*High Level Radioactive Waste Management*, High Level Radioactive Waste Program Committee, 1994), with David G. Abbott, p457-466

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Simultaneous Flow Visualization and Hot-Film Measurements, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), with Yarko Niño and Marcelo García, p490-499

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A Practical Application of Concession Schemes to Space Energy Projects, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p658-667

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Reactor Life: Impacts on Waste Management, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Billy M. Cole, p1562-1566

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The Law of the Colorado River: Can It Cope With Severe
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Hurricane Andrew's Effect on Manufactured Housing, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p158-165

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Robust Active Control of Cable-Stayed Bridge Subjected to Earthquake Ground Motion, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), with Alan G. Hermried and Dietmar Scheer, p317-326

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Methods to Reduce the Settlement of Embankments on Soft Clay: A Review, (Vertical and Horizontal Deforma-tions of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p77-91

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Ocean Wave Measurement and Analysis, with J. Michael Hemsley, ed., 1994, 0-87262-922-8, 1055pp.

Overview of the Sines West Breakwater Reconstruction. (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p1-2

see Edge, Billy L., (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p1024-1039

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Kentucky's Experience with CRM-HMA, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Karen A. Sizemore, Robert D. Bosley and Philip A. Creamer, p432-440

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Representation of Case Memory for Structural Design, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2030-2037

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Estimation of Field Site Flow Parameters, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Salwa Rashad, John Hoopes and Tswn-Syau Tsay, p303-307

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Acoustic Emission Monitoring of Steel Bridges, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with T. Kratochvil, p1322-1327 see Schreyer, H. L., EM Sept. 94, p1913-1930

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NPDES Storm Water Permit Compliance at Air Force Installations, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Marvin Smith, p1224-1228

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Constitutive Model for Viscoelastic-Fluid Dampers, (Structures Congress XII, N. C. Baker, ed. and Barry J. Lood-no, ed., 1994), p857-862

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Best Route GIS System, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with L. Yu Lin, p1123-1130

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Three Dimensional Modelling of Estuarine Sediment Transport, (Estuarine and Coastal Modeling III, Malrausport, tessuarine and Coastal Modeling III, Mal-colm L. Spaulding, ed., Keith Bedford, ed., Alan Blum-berg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), with C. LeNormant, E. Peltier, C. Teisson, M. Markofsky and W. Zielke, p42-57 Maldague, T.

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Risk and Reliability of Water Resources Infrastructure and Engineering Approaches to Risk and Reliability Analysis, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p338-339

Risk Simulation Model for Rehabilitation Studies, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Sta-khiv, ed., 1994), with David Moser, Michael Walsh, Walter Grayman and Craig Strus, p274-279

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A Computerized Open Channel Flow Measurement Device, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p27-36

Malla, Ramesh B.

Dynamic Effects of Progressive Member Failure on the Resynamic Entects of Progressive Metholer Failure on the Response of Truss Structures, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), with Baihai Wang and Butchi B. Nalluri, p60-76

Dynamic Response and Progressive Failure of Special Structures, 1993, 0-87262-946-5, 165pp.

Response of Truss Structures Subjected to Dynamic Loads During Member Failure, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with Butchi, B. Nalluri, p249-258

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Determining Optimal Parameter Dimensions for Water Dis-tribution Network Models, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Kevin E. Lansey and Kevin S. Tickle, p758-761

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New and Innovative Repair Technologies (Soil Stabilization and Pot-Hole Repair/Prevention), (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1097-1102

Recycled Material, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p828-

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Spent Fuel Characteristics Relevant to High-Level Waste (HLW) Source Term, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Prasad K. Nair and Charles G. Interrante, p560-564

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Hydraulic Conductivity Assessment of Slurry Wall Using Piezocone Test, GT Oct. 94, p1725-1746

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Development of Hardwood Glulam Timber Bridge Standards, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with J. J. Janowiak, P. R. Blankenhorn and P. Labosky, p1304-1309

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Formation and Propagation of Steep Waves: An Investigative Experimental Interpretation, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), with A. Mazzoni and F. Savi, p283-297

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Bridge, (Structures Congress XII, N. C. Baker, ed. and
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Rail Service to Airports, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p140-149

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Design Considerations for Night Storage in Irrigation Systems, (Water Policy and Management: Solving the Prob-lems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p331-334

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Beneficial Use of Ash: An Innovative Approach to Sludge Management, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with John R. Amend and Mark K. Ballerstein, p146-153

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Optimization Analysis of Deficit Irrigation Systems, with Pompeo Mecarelli, IR May/June 94, p484-503

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A Comparison of Spent-Fuel Shipping Cask Response to 10 CFR 71 Normal Conditions and Realistic Hot Day Extremes, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Steven Eric Gianoulakis, p788-795

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Thermosyphon Analysis of a Repository: A Simplified Model for Vapor Flow and Heat Transfer, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Mark W. Powell, p2207-2216

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Multiobjective Models for Determining Freshwater Inflows to Bays and Estuaries, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Lise LeBlanc, James Siebert, Wenchin Shi and Larry W. Mays, p649-652

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Vertical and Horizontal Deformations for Foundations on Sand: An Experimental Study, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p179-189

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March, Patrick A.

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Treatment of Drinking Water Containing Bromate and Bromide Ions, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with Steven J. Medlar, p476-483

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Validation of a Continental-Scale Storm Surge Model for the Coast of Delaware, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), with Norman W. Scheffner, p249-263

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see Malcherek, A., (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swan-son, ed., 1994), p42-57

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Vertical Pavement Strain as Means of Weighing Vehicles, with R. J. Jewell, TE July/Aug. 94, p617-632

Monitoring of a dredging operation using innovative sediment tracing techniques, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1360-1369

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A Summary of the NEPSTP Nuclear Safety Program, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with G. Kompanietz, p708-716

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A Comprehensive Bridge Management System for Illinois, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Todd Ahrens and Paul D. Thompson, p1859-1866

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see Peterman, Z. E., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1316-1323

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Strontium Isotope Geochemistry of Soil and Playa Deposits Near Yucca Mountain, Nevada, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Shannon A. Mahan, p2685-2691

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Homes and Needed Improvements, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p185-194

Gust Speeds in Hurricanes, (Structures Congress XII, N. C.

Baker, ed. and Barry J. Loodno, ed., 1994), p1457-1462 Sensors and Techniques for Structural Monitoring, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1379-1384

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Martin, Katherine E.

see Horsfall, Jeffrey D., (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1250-1259

Martin, L. G.

see Spengler, R. W., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2359-2366

Martin, Maria Jesus

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see van Vledder, Gerbrant, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p978-992

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Clearing the Air About Sludge Incinerator Emissions, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with Eugene W. Waltz and Richard D. Kuchenrither, p122-

Martin, Quentin W.

Alternative Designs for a Water Resources Planning and Management Electronic Information Exchange Network, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p690-693

Design and Implementation of an Optimal Real-Time Hydropower Generation Scheduling System for the Lower Colorado River in Texas, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p169-172

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see Price, R. H., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1987-1992

see Berger, R., (Estuarine and Coastal Modeling III, Mal-colm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swan-son, ed., 1994), p1-13

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see Reser, Andrew J., (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p44-58

Martin, William D.

The Dredging Research Program Technical Area 3, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p11-17

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Martínez, Jesús Martínez

Cartographic Characterization of the Littoral Camps of Dunes, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p462-475

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State and Resource Based Construction Process Simula tion, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Photios G. Ioannou and Robert I. Carr, p177-184

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see Buggy, Fintan J., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p548-560

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TIGER and Census Bureau Data in a GIS: A Powerful Combination for Civil Engineers, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p225-232

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Analysis of Levee Design in a Mountain River Using Two-Dimensional Flow Modeling, (Hydraulic Engineer-Indestonal Flow Modering, (ryarautic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Andrew J. Miller, James A. Smith and Wei-hao Chung, p757-761

see Miller, Andrew J., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

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Vibration Characteristics of Suspension Membrane Structures, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with Kazuo Ishii and Ryo Muranaka, p732-741

Transfer Vehicle Sizing for Missions to Mars, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1355-1364

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Study on Reinforced Concrete Cylindrical Shells with Edge Members under Impact Loading, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with Hidehiro Yoshitake, Masaya Noguchi and Masatoshi Hotta, p847-856

Masih, Rusk

Computer Model Pointing to Dynamic Instability of Lift Slab Structure, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1832-1838

Foundation Uniform Pressure and Soil-Structure Interaction, GT Nov. 94, p2064-2071

Stability of Lift Slab Structure During Construction Stage, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p271-277

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Field Performance of an Acoustic Scour-Depth Monitoring System, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), with D. Max Sheppard, p366-375

Experimental Study of Embedded Fiber-Optic Strain Gauges in Concrete Structures, with M. S. Agbabian, A. M. Abdel-Ghaffar, M. Higazy, R. O. Claus and M. J. de Vries, EM Aug. 94, p1696-1717

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see Stern, Eric, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p458-467

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see Ollivier, J. P., (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p175-185

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A GIS Foundation Example, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2175-2182

Estimating Air Conductivity and Porosity from Vadose-Zone Pumping Tests, with Mark Madden, EE Mar./Apr. 94, p313-328

Massucco, Joseph

Asphalt Rubber a Federal Perspective, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p467-474

Masuda, Sumio

Core Message from PNC/H-3 and Key Issues for the Next Milestone, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Katsuhiko Ishiguro, Mikazu Yui and Tadashi Mano, p1501-1507

Mather, Bryant

Durable Concrete, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p52-63

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Corrosion Resistant Epoxy-Coated Reinforcing Steel, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with James R. Clifton, p109-115

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Matthewest, Washington, Water Supply IRP, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Lloyd Skinner and Lisa Tobin, p404-407

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Beneficial Uses of Dredged Material: Part of the Solution to Restoration of Louisiana's Coastal Wetlands, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p626-630

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see Kawaguchi, Mamoru, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p383-392

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Experimental Study on a Buckling Behavior of a Wooden Single-Layer Space Frame of Reticular Shell on a Hex-agonal Plan: Influence due to the Bolted Joint Looseness with Axial and Bending Resistance, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with Shigeru Aoki, p152-161

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Delineating Limits of Remediation for Heavy Metal Contaminated Sediments in River and Cove Areas, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with Thomas mg 54, E. Clark McNair, Jr., ed., 1994), with Holinas M. Simmons, p1240-1249

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Repair of Abrasion/Erosion Damage to Vallecito Dam with Silica Fume Concrete, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Glenn Smoak, p735-742 Mattingly, Stan B.

Using Geographical Information Systems to Manage a Multipurpose Water Project, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p33-36

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Application of OOP and GUI to the Development of Educational Software in Structural Mechanics, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with V. Aruna, p1273-1279

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Topology Optimization of Plate and Shell Structures, (Spaal, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with E. Ramm, p946-955

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Dioxin Capping Management and Monitoring Program: Design and Implementation, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), with Douglas Pabst and Scott McDowell, p1027-1036 see McDowell, Scott, (Dredging '94, E. Clark McNair, Jr.,

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see McDowell, Scott, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1270-1277 see Murray, Peggy, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1285-1294

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Impediments to the Implementation of Seismic Isolation, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p128-133

Seismic Isolation Retrofit of Existing Bridges, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Deepak Choudhury, Robert S. Crooks, David M. Jones and Richard P. Knight, p1179-

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CPT-Based Prediction of Footing Response, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens,

ed., 1994), p214-218

Nonlinear Undrained Lateral Response of Rigid Drilled Shafts Using Continuum Theory, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with Fred H. Kulhawy and Charles H. Trautmann, p663-676

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Toe Scour Protection Methods, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1035-1039

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Methods for Risk and Reliability Analysis, (Risk-Based
Decision Making in Water Resources VI, Yacov Y.
Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p26-44

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see Bao, Yixing, WR Mar/Apr. 94, p199-217
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Solving the Problems, Darrell G. Fontane, ed. and
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Tivel ed. 1994), p652-856

Tuvel, ed., 1994), p653-656 see Mao, Ning, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N.

Tuvel, ed., 1994), p649-652

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see Zhao, Bing, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N.

Tuvel, ed., 1994), p645-648

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see Jacak, Jerzy T., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p176-181

Analysis of Missouri River System Operations Alterna-tives, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Lawrence Cieslik, Tom Cannon and Lon Hachmeister, p814-817

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see Cieslik, Lawrence J., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p673-676

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The Danby Pipe Renovation System, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p144-158

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Coastal Engineering Data Retrieval System (CEDRS), (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), with Doyle L. Jones, p330-338

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see Wible, Lyman, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p468-473

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Microworlds for Learning Through Inquiry, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Matthew W. Lewis and Miriam Bishay, p1067-1074

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Atmospheric Circulation and Snowpack in the Gunnison River Basin, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p481-484

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Large-Scale Computations in Analysis of Structures, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), with G. L. Goudreau, p183-192

Nonlinear Model for Building-Soil Systems, with K. M. Romstad, EM May 94, p1129-1152

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Flood Monitoring Network In Southeastern Louisiana, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p346-350

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Hydration Mineralogy of Cementitious Coal Combustion By-Products, (Advances in Cement and Concrete, Mi-chael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), with J. K. Solem-Tishmack, p103-121

McCartin, Timothy

Models for Source Term, Flow, Transport and Dose As-sessment in NRC's Iterative Performance Assessment, Phase 2, (High Level Radioactive Waste Management, high Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Richard Codell, Robert Neel, William Ford, Rex Wescott, John Bradbury, Budhi Sagar and John Walton, p1469-1479

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see Bonner, George P., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p28-37

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Visitor Usage Analysis as Basis for Marina Expansion, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), with John C. Corrough, p597-604

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see Sherman, D. J., (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p476-487

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Analysis, by Ellis L. Krinitzsky, CE Nov. 93, p60-61), CE Mar. 94, p30 disc. (of The Hazard In Using Probabilistic Seismic Hazard

McClure, Ghyslaine

Seismic Behaviour of Tall Guyed Telecommunication Towers, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with Eduardo I. Guevara, p259-268

Transient Response of Guyed Telecommunication Towers Subjected to Cable Ice-Shedding, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with Na Lin, p801-809

McCombie, C.

Programme, (High Level Radioactive Waste Disposal Programme, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p238-248

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1993 Mississippi Record Stages and Levee Failures, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p603-607

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see Sharpe, Saxon E., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2538-2544

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Isotopic Studies of Yucca Mountain Soil Fluids and Car-bonate Pedogenesis, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Joseph F. Whelan, Kimberley P. Wickland and Richard J. Moscati, p2584-2589

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Staff Technical Position on Consideration of Fault Displacement Hazards in Geologic Repository Design, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Michael P. Lee, p2257-2259 McCormick, James M.

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Application of Numerical Models in the Design of Clarifiers, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with S. P. Zhou, p186-193

The Computer Proincering '94, George V.

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see Zhou, Siping, HY Sept. 94, p1060-1080

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McCoy, M.

A Study of Communication Signal Leakage Through the Earth's Ionosphere Using Ray-Tracing Techniques, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with J. P. Basart, p553-561

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94, p326-328 EI July 94, p328-329 clo:

Constructivist Learning Model for Ethics Education, EI July 94, p273-278

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A Hypermedia Constructability System, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Bob Patty, p1397-1404

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2D Bar-Code Applications in Construction, with Kamolwan Lueprasert, CO Dec. 94, p739-752

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A Piezoelectric Sediment Density Probe, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with A. D. King and S. J. Smyth, p239-248

McDonald, Ellen Thomas Issues Related to Modeling the Transport of Suspended Sediments in Northern San Francisco Bay, California, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), with Ralph T. Cheng, p551-564

McDonald, James E.

Innovative Applications of Precast Concrete in Repair of Hydraulic Structures, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p963-970

McDonald, James R.

The Manufactured Home Dilemma, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994),

McDonald, John W.

disc. (of International Information and Technology Transfer, by Charles G. Gunnerson, El Oct. 91, p336-350), El Jan. 94, p110-112

McDonough, Frank

Dredging in 3D - Delays, Damages and Disputes, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with Patrick A. McGeehin and Steven Kmieciak, p1305-1314

McDonough, Tom

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Simulation of Wave and Beach Profile Change in SUPER-TANK Seawall Tests, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with Nicholas C. Kraus and Harman Ajiwibowo, p278-295

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The December 1992 Storm at the New York Mud Dump Site, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), with Brian May and Douglas Pabst, p786-795

The Dioxin Capping Project at the NY Mud Dump Site, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with Brian May and Douglas Pabst, p1270-1277

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NASA's Mission to Planet Earth: Will Civil Engineering Reap Benefits?, El Oct. 94, p401-404

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Managing Performance of Engineers, ME Sept./Oct. 94, p28-33

McFarland, Victor A.

TBP Revisited: A Ten Year Perspective on a Screening Test for Dredged Sediment Bioaccumulation Potential, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with Paul W. Ferguson, p718-727

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Treatment of Uncertainty in the NRC Regulatory Process, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with F. Stanley Echols, p1404-1416

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see McDonough, Frank, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1305-1314

see Seymour, Richard, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p105-123

see Tubman, Michael, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p547-553

McGehee, David D.

Implementing a National Wave Monitoring Network-Some Lessysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), with J. Michael Hemsley, p208-222

McGennis, Robert B.

see Anderson, R. Michael, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p880-887

McGinley, William M.

see Abu-Saba, Elias G., (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p124-134

see Shen, Ji Yao, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p27-36

see Shen, Ji Yao, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p110-123

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see Engel, David W., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1214-1221

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see Edinger, John Eric, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p536-550

McHaney, Steven X.

Costs and Benefits of Meeting the San Francisco Bay Copper Objective by Regulating Small Treatment Plants, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1232-1236

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see Temus, Charles J., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p452-456

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see Selfridge, Thomas E., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p571-583

McIntyre, Charles

CAD-Based "Intelligent" Drawings: An Automated Quality AD-Based Intelligent Drawings: An Automated Quarty Control Approach to Land Development, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Kevin Parfitt and Matt Syal, p547-554

McIntyre, J.
see Byrne, P. M., (Vertical and Horizontal Deformations of
Foundations and Embankments, Albert T. Yeung,
ed. and Guy Y. Félio, ed., 1994), p1864-1896

McKay, David S.

JSC-1: A New Lunar Soil Simulant, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with James L. Carter, Walter W. Boles, Carlton C. Allen and Judith H. Allton, p857-866

See Allen, Carlton C., (Engineering, Construction, and Op-erations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994, p.1157-1166 see Allen, Carlton C., (Engineering, Construction, and Op-

erations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1220-1229

see Chambers, John G., (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p878-888

see Gruener, John E., (Engineering, Construction, and Op-erations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p998-1007

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Computerized Building Settlement Analyses for a Contaminated Groundwater Remediation Project, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1228-1235

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Gully Erosion Minimization on Reclaimed Surface Mines Using SSAST Computer Model, with Thomas W. Gardner, IR Sept./Oct. 94, p910-924

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Aquifer Remediation Design: Nonlinear Programming and Genetic Algorithms, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Gregory B. Gages and Min-Der Lin, p254-257

McKinney, James P.

A Method for Locating Spikes in a Measured Time Series, (Ocean Wave Measurement and Analysis, Orville T Magoon, ed. and J. Michael Hemsley, ed., 1994), p388-

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see Johnson, Terry L., (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Ed-

wards, ed., 1994), p702-709

see Sandino, Julian, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p686-693

McKnight, Steven H.

McKnight, Steven H. Surface Preparation of Steel for Adhesive Bonding in Rehabilitation Applications, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Pierre E. Bourban, John W. Gillespie, Jr. and Vistasp M. Karbhari, pl 148-1155
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Methods of Repair, Kim D. Basham, ed., 1994), p295-302

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Developing a National Spatial Data Infrastructure, with
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Port Authority's Role in Inlet Management and Beneficial Use of Dredged Material, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with Joseph Lapolla and Kevin Bodge, p971-980

McMahon, David J.

see Kropp, Alan L., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1531-1542

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Building A Barrier Wall Through Boulders, with Michael J. Mann and Robert C. Tulett, CE Oct. 94, p60-62

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Cyclic Axial Loading of Drilled Shafts in Cohesive Soil, with Fred H. Kulhawy, GT Sept. 94, p1481-1497

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see Pēna, Feniosky, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p17-24

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Cyclical Behavior of Welded Steel Shear Studs, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Abolhassan Astaneh-Asl, p1024-1029

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see Horrocks, Gilbert, IR May/June 94, p607-616

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Bevaluation of Dynamic Compaction of Low Level Waste Burial Trenches Containing B-25 Boxes, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p44-54

McMurry, J.

see Melnyk, T. W., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1222-1228

McNair, E. Clark, Jr. Dredging '94, 2 Vols., 1994, 0-7844-0010-5, 1580pp.

McNamara, Robert J.

Lateral Load Resisting Systems for Circular Buildings, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Brent R. Goldstein, p636-641

Coupled Mass-Transport and Chemical-Equilibrium Mod-elling of Bronze Disease, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with J. C. Walton, p1014-1019

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Arsenic Removal Via Softening, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with Marc Edwards, p640-

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see Gregg, Tony T., (Revenue Enhancement for Water and Wastewater Systems, Jerry R. Rogers, ed. and William P. Bullock, Jr., ed., 1994), p1-7

Development of a Wetland/Riparian Resource Model for the Missouri River System, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with D. Becker, R. Tressler, J. Cannon and J. Rude, p746-749

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Design of Socketed Drilled Shafts in Limestone, with F. C. Townsend and R. C. Williams, GT Oct. 92, p1626-1637 disc: J. M. Amir, GT Feb. 94, p460-461

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see Huntley, D. A., (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p143-157

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Petroleum Contaminated Soils in Highway Construction, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with A. Samer Ezeldin, David A. Vaccari and Robert T. Mueller, p904-911

Meegoda, Jay Namunu

Modeling Viscoelastic Behavior of Hot Mix Asphalt (HMA) Using Discrete Element Methods, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with K. George Chang, p804-811

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California Housing Damage Related to Expansive Soils, with Lawrence B. Karp, CF May 94, p139-157

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Meek, J. L.

Elasto - Plastic Analysis of Cable Net Structures, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p781-790

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Cone Models for Embedded Foundation, with John P. Wolf, GT Jan. 94, p60-80

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see Ligteringen, H., (Reconstruction of the West Breakwa-ter at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p168-186

Mefford, Brent W.

see Frizell, Kathleen H., (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p268-277

Conceptual Design and Characteristics of A Dual-Arm Cam-Lock Manipulator, (Robotics for Challenging En-vironments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p140-148

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Mehta, Kishor

see Peterka, Jon A., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p461-466

Mehta, Kishor C.

Field Experiments for Wind Effects on Low Buildings, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Douglas A. Smith and Byron B. Yeatts, p1451-1456

Knowledge-Based System for Wind Damage to Buildings, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), with Douglas A. Smith and Ronald H. Cheshire, p726-735

Mehta, Neel

see Jennings, Aaron A., EE Sept./Oct. 94, p1132-1150

Mineral Admixtures for Concrete - An Overview of Recent Developments, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p243-256

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FRP Box-Beams Under Long-Time Static and Fatigue Loading, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p411-416

Meike, Annemarie

Progress in Understanding the Structure and Thermodynamics of Calcium Silicate Hydrates, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), with Maria Onofrei, Carol J. Bruton and Brian E. Viani, p2590-2596

Meininger, Curtis A.

Environmental Monitoring and Mitigation: Harbor Tunnel Dredging and Disposal Operations, Boston, Massachu-setts, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), with Alan D. Randall, p1471-1480

Mejia, Lelio H.

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A Physically Based Conceptual Model for Simulating Contaminant Levels in Subsurface Water, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Mohamed M. Hantush and Miguel A. Mariño, p355-358

Melaragno, Michele

Tensegrity Structures: Filling the Gap Between Art and Science, (Spatial, Latine and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1024-1035

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Scale and Modeling Effects in Concrete Armor Experiments, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with George F. Turk, p686-700

Melcer, H.

Modeling Volatile Organic Contaminants' Fate in Waste-water Treatment Plants, with J. P. Bell, D. J. Thompson, C. M. Yendt, J. Kemp and P. Steel, EE May/June 94, p588-609

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Melhem, Hani

Computer Analysis of Continuous P/C Highway Bridge Girders with Variable Depth, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Weiqun Zhang, p696-703

A Simplified Method of Multistory-frame Analysis Including the P-Δ Effect, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Khalid Niazi, p1302-1309

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Bridge Condition Rating Using Fuzzy Sets and an Eigenvector of Priority Settings, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Senaka Aturaliya, p1908-1915

Usage of Adhesives and Composites in Highway Struc-tures, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with John R. Schlup, p983-990

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Investigation and Design Concepts for a Nuclear Waste Repository in the Kola Peninsula of Northwest Russia, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with William R. Sharp, p523-529

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Sensitivity of Radiological Impacts of a Waste Disposal System to Radionuclide Sorption in the Geosphere, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with J. McMurry and F. P. Sargent, p1222-1228 Melville, B. W.

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Memory, Richard D.

Waste Package Performance Allocation System Study Report, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p969-976

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See Swanson, J. C., (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Rajh Cheng, ed. and Craig Swan-son, ed., 1994), p656-678

Mendelsohn, Roy

Early-Completion Schedules: The Promise and Pitfalls, ME Jan./Feb. 94, p28-30

Mendes, Stanley H.

disc. (of The Hazard In Using Probabilistic Seismic Hazard Analysis, by Ellis L. Krinitzsky, CE Nov. 93, p60-61), CE Mar. 94, p32

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disc. (of Measurement and Prediction of Surface Shear Stress in Annular Flume, by D. I. Graham, P. W. James, T. E. R. Jones, J. M. Davies and E. A. Delo, HY Sept. 92, p1270-1286), HY Mar. 94, p414-415

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Is Bedform Development Chaotic?, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p78-81

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Preliminary Results of Paleoseismic Investigations of Ouaternary Faults on Eastern Yucca Mountain, Nye County, Nevada, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with J. R. Wesling, J. W. Whitney, F. H. Swan, J. A. Coe, A. P. Thomas and J. A. Oswald, p2373-2390

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Measured Total Wave Climate of a Small Craft Harbor, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p90-104

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Numerical Simulation of One Dimensional Transcritical thierical simulation of the Difficulties of the Flow, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Fotis Sotiropoulos and Forrest M. Holly, Jr., p512-516 Meskouris, Konstantin

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Prediction of Settlement of Footings on Sand, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), with M. Shahien, p188-191

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Settlement of Embankments on Soft Clays, (Vertical and Horizontal Deformations of Foundations and Embank-ments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with Dominic O. Kwan Lo and Tao-Wei Feng, p8-56

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Developing an Object Based Planning System for Precast Concrete Building Structures, (Computing in Civil Engi-neering, Khalil Khozeimeh, ed., 1994), with Victor E.

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3D model verification for a groyne and harbor experiment, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with K. -P. Holz, p905-909

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Goals and Requirements for Scientific Lunar Rovers, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p166-174

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Effects of Climate Change on Water Quality, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with G. T. Orlob, p275-278

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Determinants and Trends in Water Right Market Prices, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Patrick Person and Robert A. Young, p165-168

Developing Economic Performance Information for Water Management Projects in North China, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Jona Bargur,

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Discharge-Frequency Relationships in Distributary Flow Systems, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1085-

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Experimental Field Investigations of Small Delta Formation, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p175-

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Financing Construction and Operation Costs for Parks and Recreation Facilities, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p360-369

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The Welland River Dredging Demonstration, (*Dredging* '94, E. Clark McNair, Jr., ed., 1994), with Donald Marr, p1061-1070

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Bed Material and Numerical Modeling in a Gravel/Cobble Bed Stream, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Russell A. Dodge and Perry L. Johnson, p1055-1059

Flushing Flows for the Water Manager, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p226-229

On Habitat Simulation in Mountain Rivers, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p850-854

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Equilibrium Geometry of Channels with Cohesive Banks, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with M. C. Quick, p964-968

Flow Resistance of High-Gradient Gravel Channels, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with M. C. Quick, p717-

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Boundary Conditions and Flow Patterns in a Mountain River, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Diane M. L. Mas, James A. Smith and Wei-Hao Chung, p762-766

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Monitored Retrievable Storage (MRS) Facility Project Status, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Victor W. Trebules and James B. Blandford, p1358-1364

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Evaluation of Enhanced Coagulation for DBP Control, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with Sheila A. Nolan, Marcus J. Dryfuse and R. Scott Summers, p484-491

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Fibre Reinforced Concrete - Myth and Reality, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p217-222

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Habitat Restoration Using Dredged Material: The Sonoma Baylands Wetland Demonstration Project, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p928-937

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Assessment of BNR Systems in Florida, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with C. William Woods, p436-443

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Progress in Reinforced Concrete Column Design: An Introduction, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p429-431

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The Human Impact of Hurricane Iniki, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p259-267

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A Surfzone Parameter Sensitivity Analysis on LIP11D Sus-pended Sediment and Return Flow Measurements, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with A. Reniers and G. Smith, p571-585

On the Dynamics and Control of Flexible Orbiting Systems: An Approach with Application, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with A. Suleman, p1-17

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Comparison of Eulerian-Lagrangian, Random Walk and Hybrid Methods of Modeling Pollutant Transport, (Estu-arine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), with E. Eric Adams, p609-623

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Molinaro, P.
Modelling of Flood Wave Propagation Over Flat Dry Areas of Complex Topography in Presence of Different Infrastructures, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), with A. Di Filippo and F. Ferrari, p209-228

see Amighetti, F. F., (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p143-155

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Modelling of Flood Propagation Over Initially Dry Areas, with Luigi Natale, ed., 1994, 0-7844-0035-0, 375pp.

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gram Committee, 1994), p823-830

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A-Tough: A Multimedia Fluid-Flow/Energy-Transport Model for Fully-Coupled Atmospheric-Subsurface Interactions, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Dale Hammermeister and Joseph Ginanni,

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Nowcast System Development for the Straits of Florida, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), with Dong-Shan Ko, p158-171

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Macro-Roughness Effects on Stream Reaeration, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Gerhard H. Jirka, p994-998

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Effects of Particle Shape on Bedload Transport, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with P. Diplas, p800-804

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AISI-FHWA Model Bridge Test, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1065-1070

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The Effect of Member Snap on Progressive Collapse of Space Structures, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p17-31

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Crack Depths in Drying Clays Using Fracture Mechanics, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), with James Graham and David J. Williams, p40-53

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Characteristics of Mechanical Connectors for Construction of FRP Structures, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with J. Larralde, p991-1000

Design and Construction of Fiberglass Composite Building, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with J. Larralde, p751-757

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Performance and Analysis of Frames With "URM" Infills, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), with Peter Gergely and Richard N. White, p57-66

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Connections for Pultruded Composites: A Review and Evaluation, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1001-1017

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In Situ Sediment Treatment of Dofasco Boatslip, Hamilton Harbour, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), with Henry Brouwer and Jay Babin, p1071-1080

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Concept for Hazardous Material Management and Container Closure Using Copper Based Alloys, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1000-1007

Progress in England and Wales on the Development of Beneficial Uses of Dredged Material, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p644-653

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Chemical Flux of Pore Water Through Sediment Caps, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with Drew Carey and Thomas J. Fredette, p1008-1016

Integrated Acoustic Seafloor Characterization, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with Ed DeAngelo, Jeff Parker and Thomas J. Fredette, p295-303

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Management of San Diego Bay Dredged Material Disposal, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p332-341

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Procedures for Evaluating the Effects of Sedimentation on Flood Hazards in Urbanized Areas in the Southwestern U.S., (Water Policy and Management: Solving the Prob-lems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with P. F. Lagasse, M. D. Harvey and C. A. Anderson, p425-428

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see Duncan, J. Michael, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p92-106

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see Reible, D. D., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1490-1496

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Free surface flow modelling on a complex topography, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), with Gerard Brugnot, p298-308

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Unified Code Provisions for Concrete Bridges, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p555-560

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see GangaRao, Hota V. S., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p844-848

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Applicability of Pseudo-force method to Highly Nonlinear Dynamic Problems, (Analysis and Computation, Frank-lin Y. Cheng, ed., 1994), with Andrei Reinhorn, p165-172

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Nagaia, Satoshi Nakajima Subsurface Dam, (Water Policy and Manage-ment: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Kazuki Azuma, Masato Asano, Teruyuki Nishijima, Hideaki Shiiba, David S. Yang and Reika Nakata, p437-440

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Benefits of Hazard Mitigation Planning to Reduce Shoreline Impacts Due to Great Lakes Water Level Management Fluctuations and Severe Storms, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Darryl Hatheway, p182-186

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Optical Waveguide Solar Energy System for Lunar Material Processing, (Engineering, Construction, and Opera-tions in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with Constance L. Senior, James M. Shoji and Robert D. Waldron, p1266-1277

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Cost-Schedule Integration for Cash-Flow Forecasting, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1536-1539

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Modal Interaction in the Response of Laminates, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994),

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Case Study of Navy Pier Pile Foundation Installation, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), with Jeffrey S. Russell, p311-320

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Cement and Concrete: Their Interrelation in Practice, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p1-14

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Land Development Regulations: Roadblock to Affordable Housing, with S. L. Cheng, UP Mar. 94, p22-27

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West Breakwater Rehabilitation and Construction Supervision, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), with H. de Jong, p327-407

see Ligteringen, H., (Reconstruction of the West Breakwa-ter at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p428-439

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Failure of Residential Building Envelopes as a Result of Hurricane Andrew in Dade County, Florida, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), with Chris Hanson, p396-508

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Microstructure of the Paste - Aggregate Interface, Includ-ing the Influence of Mineral Additions, (Advances in Ce-ment and Concrete, Michael W. Grutzeck, ed. and Shon-deep L. Sarkar, ed., 1994), with M. Massat, p175-185

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Production of Lunar Concrete Using Molten Sulfur, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with Mohsen Issa, p952-959

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Statistical Response of a Class of Hysteretic Systems, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with G. Ahmadi, p405-410

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Wave Monitoring in The Southern California Bight, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), with R. J. Seymour, R. T. Guza and D. Castel, p448-457

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Mapping 2-D and 3-D Velocity Components in Circular Conduits Using an Electromagnetic Current Meter and a 5-Hole Pilot Probe, (Fundamentals and Advancements Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), with Lawrence J. Swenson,

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SQP Methods for Inverse Airfoil Design, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), with Omar Ghattas, p297-306

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An Information Engineering Approach for Environmental Impact Assessment and Monitoring Program, (Comput-ing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Shu-Fang Peng, p249-256

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An Integrated Approach to the Real-Time Control of Water Supply and Distribution Systems, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Bryan Coulbeck, p850-854

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Progression of Computer Applications in Water Supply and Distribution Systems, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p622-629

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see Andrés, Oscar A., (Spatial, Lattice and Tension Struc-tures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p320-329

Ortigao, J. A. R.

Consolidation Characteristics of an Offshore Clay Deposit, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with A. S. F. J. Sayao, p1415-1424

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The Use of Secondary Products in the Cement and Concrete Industry, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p107-121

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New Technology for Navigation Entrance Black River Canal, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), with Kevin MacIntosh and Dave Werren, p387-397

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Trenchless Sewer System Reconstruction Techniques, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p159-172

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The Continental Shelf: A Source for Naturally-Delivered he Continental Shell: A Source for Naturally-Delivered Beach Sand, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with Kelly A. Ahlschwede, Sean D. Broadhead, Kyung Cho, Joshua R. Feffer, Arthur C. Lee, Jinyou Liu, Craig Magnusen, Janette M. Murrillo de Nava, Rory A. Poblessen-Chic Chew School VI. 10, 2235 240 Robinson, Chia-Chen Yeh and Yi Lu, p335-349

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Innovations in Major Suspension Bridge Design, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p772-778

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Designing Optimal Reliable Multiquality Water Supply Systems, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Uri Shamir, p270-274

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New Bedford Harbor, Massachusetts Dredging/Disposal of PCB Contaminated Sediments, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p579-587

Computer-Integrated Construction and CM Firms: A Profitable Combination, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Matt Syal and Gary Gehrig, p1751-1755

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Eliminating Water Column Separation and Limiting Backspin at a 12,000-Horsepower Pumping Plant, (Funda-mentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), with David Hoisington and David Raffel, p435-444

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Stratified Flow in an Impounded Inland River, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with William R. Naumann, p569-573

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Precedents in Design: A Computational Model for the Organization of Case Knowledge, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p438-445

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Expandable Structures with Incorporated Roofing Elements, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with F. Escrig and E. Martín, p752-761

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Preliminary U-Series Disequilibrium and Thermolumines-cence Ages of Surficial Deposits and Paleosols Associated with Quaternary Faults, Eastern Yucca Mountain, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994, with C. M. Menges, B. Wildmann, J. R. Wesling, C. A. Bush, K. Futa, H. T. Millard, P. B. Maat and J. W. Whitney, p2391-2401

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The Use of Iron Salts to Control Dissolved Sulfide in Districts' Trunk Sewers, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with William A. Kimbell and John A. Redner, p743-750

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A Reliability Model for Fatigue and Corrosion of Hydraulic Steel Structures, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Cameron Chasten, Paul Mlakar and Reed Mosher, p1217-1224

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Advancement of Material Handling Technologies for In-Place Asphalt Pavement Recycling, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), with Ilan Ishai, p365-373

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Pile Settlement Based on Dynamic Measurements, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with Valerie A. LaBelle, John E. Regan and Les R. Chernauskas, p269-278

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Guidance for Wetland Restoration with Dredged Material, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with Elba A. Dardeau, Jr., p956-960

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Compressive Strength of Large Scale HSLA-80 Steel Cellular Sections of a Double Hull Ship Structure, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with James M. Ricles, Le-Wu Lu and Perry Green, p1538-1543

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The Navigation Data Center and Its Role in Dredging Management, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p490-498

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Rate Dependent Plasticity and Damage for Concrete, (Ce-ment Manufacture and Use, Paul W. Brown, ed., 1994), with J. Lubliner and P. J. M. Monteiro, p27-40

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Short Synthesis of Some Studies Carried Out for the Repairing of Sines Port West Breakwater, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), with S. Corsini, p70-98

Papacostas, C. S. Using GIS Technology to Assess Hurricane Damage, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), with Wayne M. Hamaguchi, Harold S. Hamada and John Jaquess, p607-616 see Oloufa, Amr R., CO Mar. 94, p211-222

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Non-Linear Solution Methods for Shell and Spatial Struc-tures, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p180-189

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see Taha, Ramzi, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p170-177

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Development of a Visual Method to Track the Movement of Hydrogen Bubbles in a Laboratory Flume, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), with Panayiotis Diplas, p205-212

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Calibration of a Highway Traffic Assignment Model for the Manhattan Central Business District, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with J. C. Falcocchio and L. Maynus, p720-727

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Objectives of Proposed Large Scale Experimental Facility (ESTEX), (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with W. H. McAnally, Jr. and G. Nail, p809-814 see Sharp, James J., HY May 93, p615-627

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Overcrossing a Freeway with Water Pipelines in Dedicated Structures, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p387-394

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Emergency Response Preparedness Analysis for Radioactive Materials Transportation, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Shashi K. Sathisan, Sandeep S. Burli and Walter C. Vodrazka, p1249-1254

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IPA Phase 2 Total System code and Scenario Analysis, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Robert G. Baca, Norman A. Eisenberg, Ronald W. Janetzke and Budhi Sagar, p1461-1468

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Numerical Modeling of Advective and Diffusive Transport in the Rappahannock Estuary, Virginia, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), with Albert Y. Kuo, p461-474

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Developing Retrofit Strategies for the China Basin Viaduct Foundations Using Non-linear, Hysteretic Analysis, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with John C. Castro and R. A. Dameron, p1839-1845

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Computing and Design in Structural Engineering A Practicing Engineer's Point of View, (Analysis and Computicing Engineer's Point of View, (Analysis and Computing Engineer's Point of View, (Analysis and Computing Engineering Engineerin tation, Franklin Y. Cheng, ed., 1994), p369-376

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Damage to Highway Infrastructure 1993 Mississippi River Basin Flooding, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with T. E. Fenske and D. J. Hagerty, p26-30

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Constructing Beneficial Use Dredged Material Projects, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p547-

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Dynamic Optimization by Small Variation of the System Layout, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1492-1503

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LDV System for Towing Tank Applications, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), with F. Stern, p386-395

Optical Methods for Sediment-Laden Flows, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), with M. Muste, p223-232

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Mechanical Properties of Stone Mastic Asphalt, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with T. S. Vinson and R. G. Hicks, p849-858

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Rotating Crack Model and Fracture in a R/C Medium, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Theodore G. Toridis, p1944-1950

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Subjective De-Biasing of Data Sets: A Bayesian Approach, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p175-185

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Lunar ISRU: An Evolutionary Approach, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1077-

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Observations Related to the Use of the Sigma Coordinate Transformation for Estuarine and Coastal Modeling Studies, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p336-350

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Gothic Structure and Design: Narbonne Cathedral, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Robert Warden, p1568

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Urban Runoff Based on Land Use and Particle Size, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1242-1246

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Advances in 3D Modelling of Wave-Driven Currents, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p366-375

Water Transfer Law in Kansas, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p279-282

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Technology Information Transfer in Public Outreach: A New Approach, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Mindy L. Wadkins, p92-97

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and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p978-992

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Observations of Wind Wave Growth by ERS-1 SAR, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), with Antony K. Liu, p934-942

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Volatilization of Selected Organic Compounds from Quies-cent Water, with Jatinder K. Bewtra and Nihar Biswas, EE May/June 94, p662-669

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Atmospheric Transport Prediction Using an Adaptive Finite Element Method, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Ashley F. Emery, p1946-1952

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Miami International Airport Stormwater NPDES Plan, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with Jonathan Z. Goldman, Michael F. Schmidt and Edward E. Clark, p540-547

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Resilient Modulus Test Protocol for Cement Stabilized Phosphogypsum, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with John B. Metcalf, p491-498

Multi-Reservoir System Simulation Design Using C++ and Object Oriented Programming, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with K. Ponnambalam, p1030-1034

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Acoustic Emission Monitoring of Fatigue Crack Growth in No. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Steven Derrah, p1334-1339

Experiences with an Undergraduate Structural Engineering Laboratory, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Le-Wu Lu and

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In-Place Determination of Concrete Strength by the Impact-Echo Method, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Matthew Johnson, p1340-1345

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Proposed Hurricane Wind Speeds for ASCE 7-95, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Kishor Mehta, p461-466

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Isotopic Tracers of Gold Deposition in Paleozoic Limestones, Southern Nevada, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with B. L. Widmann, B. D. Marshall, J. N. Aleinikoff, K. Futa and S. A. Mahan, p1316-1323

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see Hadjerioua, Boualem, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p989-993

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see Latimer, Eduardo A., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p115-118

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see Doyle, Robert, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p552-561

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Spacecab: A Concept for Commercial Human Spaceflight, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1504-1511

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Inertially Favorable Trajectories for Robot Motion in Space, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), with Irving J. Oppenheim, p220-228

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ASCE GUIDE for Design of Guyed Transmission Structures, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p613-617 see Kluge, Robert O., (Structures Congress XII, N. C.

Baker, ed. and Barry J. Loodno, ed., 1994), p607-612

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Data Management for Large-Scale Water-Distribution Optimization Systems, WR Jan./Feb. 94, p116-120

Optimal Operation of Ground-Water Supply Distribution Systems, with O. J. Helweg and K. E. Oliver, WR Sept./ Oct. 94, p573-586

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How to Optimize Frames Using Plastic Design Concept, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p113-122

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Functional Analysis Using Partitioned Engineering Data Flow Model, with H. Craig Howard, CP Jan. 94, p2-19 Issues and Experiences in Developing Shared Object Models, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with H. Craig Howard, p584-591

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Solving Collections Problems to Increase Revenue: The Houston Experience, 1988-1993, (Revenue Enhancement for Water and Wastewater Systems, Jerry R. Rogers, ed. and William P. Bullock, Jr., ed., 1994), p8-14

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Reclamation and Water Conservation, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p573-576

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Floodflow Effects on Riparian Vegetation in Arizona, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with H. W. Hjalmarson, p707-711

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Liquid Infiltration Through the Boiling-Point Isotherm in a Desiccating Fractured Rock Matrix, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p2189-2196

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Energy-Based Failure Criterion for Wood, with Kenneth J. Fridley and David V. Rosowsky, MT Nov. 94, p578-594

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Arsenic Removal by Manganese Greensand Filters, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with T. Viraraghavan, p646-653

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Inelastic Bending and Torsion of Steel I-Beams, with N. S. Trahair, ST Dec. 94, p3397-3417

Nonlinear Inelastic Analysis of Steel Beam-Columns I: Theory, with N. S. Trahair, ST July 94, p2041-2061

Nonlinear Inelastic Analysis of Steel Beam-Columns II: Applications, with N. S. Trahair, ST July 94, p2062-2085

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The Formation of a Turbidity Maximum in an Estuary, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), with Zenitha Chroneer, Poorvi Patel and Wilbert Lick, p187-201 Pickering, C. J.

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see Bijen, Jan, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p292-328

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A Systems Approach to the Management of a Contaminated Metal Recycle Project, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Steven Wahnachaffe, p1069-1073

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Evaluation of Laboratory Limerock Bearing Ratio Test on Pavement Soils in Florida, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Zhiliang Yu, p223-230

Field Evaluation of Plate Bearing Load Test on Pavement Soils in Florida, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Ling Ge, p231-238

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Characterization of Cement-Aggregate Interfaces by Electrical Conductivity Methods, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), with J. J. Beaudoin, p15-25

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A model to describe the fate of agricultural pollutants, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with B. Caussade, p170-174

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Hydrodynamic Forces in Hydraulic Jump Stilling Basins, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), with António C. Quintela and Carlos M. Ramos, p321-330

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West Breakwater of the Port of Sines Final Rehabilitation Inspection of the Construction, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p265-301

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Building Code Enforcement Issues, Hindsight and Foresight, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p125-132

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Sines Breakwaters Monitoring Program, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), with F. Abecasis and A. Fernandes, p408-427

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Coarse Sediment Transport and the Maintenance of Fish Habitat in the Upper Colorado River, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p855-859

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A New Correction Procedure for Shipborne Wave Recorder Data, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p726-739

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General Urban Runoff Model for Water Quality Investigations, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1213-1218

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Pipe Utility Evaluations With the Aid of GIS, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p242-246

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Expansion and Contraction of Powder River Between Moorhead and Broadus, MT: Geomorphic Observations and Numerical Modeling, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p984-988

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Site Investigation Surveys for Dredging Projects, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with J. Peuchen, p322-331

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Willingness and Ability to Pay for Rural Water, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Steven Piper, p157-160

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Time-Dependent Behavior of RC Members Strengthened With FRP Laminates, with Thanasis C. Triantafillou, ST Mar. 94, p1016-1042 err: ST June 94, p1940

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A Nearshore Model for Cleveland CSO Remediation Design Selection, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Chieh-Cheng J. Yen, Lou Regenmorter, Keith W. Bedford and Onyx W. H. Wai, p222-226

Tributary Loading with a Terrain Following Coordinate System, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), with Keith W. Bedford, p475-488

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Analysis of Glass-Ceramic Production from Lunar Re-Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with B. D. Fabes, D. Allen, S. Hawley and A. Carpenter, p1278-1287

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Logistics Carriers for the First Lunar Outpost, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1046-

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Service Life Prediction, ASR Deterioration, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with G. Sam Wong, p16-26

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History of Entrance Channel Dredging and Disposal Operations: St. Marys, Georgia/Florida, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with J. Bailey Smith and Laurel T. Gorman, p906-917 see Welp, Timothy, (Dredging '94, E. Clark McNair, Jr.,

ed., 1994), p48-55

Interfaces Between Transport and Geologic Disposal Systems for High-Level Radioactive Wastes and Spent Nuclear Fuel-A New International Guidance Document, Clear Fuel—A view International Constraints of the High Level Radioactive Waste Program Committee, 1994), with K. W. Han, T. Pollog, L. Baekelandt, D. Blackman, J.-M. Hoorelbeke and J. E. Villagran, p1229-1236

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A Probabilistic Approach to Assessing Radioactive Waste Container Lifetimes, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Chris C. Naish and Susan M. Sharland, p1008-1013

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Building the Urban Environment, WP Spring 94, p41-42

Sharing the Risk, WP Special issue 94, p14-19

Tug Fork Flood Plain Modifications and Wetlands Mitigation, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with D. D. Dee, Jr. and C. Riling, p766-769

Use of FESWMS-2DH for the Attaway Road Bridge Repair Project, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with D. D. Dee, Jr. and J. Warren, p579-583

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Construction Monitoring Activities in the ESF Starter Tunnel, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Scott Carlisle, p.1993-1998

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Design of Underpinning Piles to Reduce Settlements, (Ver-tical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1000-1010

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Class A Prediction of Shallow Footing Settlements, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p133-136

Settlement Prediction for Driven Piles and Pile Groups, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1629-1649

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Standardizing Wind Measurements for Documentation of Surface Wind Fields in Hurricane Andrew, (Hurricanes of 1992: Lessons Learned and Implications for the Fu-ture, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), with Samuel H. Houston and Timothy A. Reinhold, p52-69

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Large-Stone Aggregate-Modified Asphalt Mixes, (Infra-structure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Joseph D. Armijo, p627-634

Montana Experience with Polymer Modified Asphalt, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Joseph D. Armijo, p311-318

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Probable Maximum Flood Estimation for New and Existing Dams, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p361-

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Ground Failures Under Seismic Conditions, Geotechnical Special Publication No. 44, with Panos Dakoulas, ed., 1994, 0-7844-0055-5, 260pp.

Prarentela, Emelinda M.

see Sathisan, Shashi K., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1270-1277

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Automated Post Irradiation Handling of Spent Nuclear Fuel In PNC's FMF-2 Facility Test Hot Cell, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Thomas R. Frantz, p358-362

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Mechanical and Bulk Properties in Support of ESF Design Issues, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with R. J. Martin, III, P. J. Boyd and J. S. Noel, p1987-1992

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The Management of Dredged Material Placement for the Development of Oyster Rock on the Eastern Shore of Virginia, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p394-398

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Hot-Film Response in Three-Dimensional Highly Turbu-lent Flows, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p176-184

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agement, High Level Radioactive Waste Program

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Modelling Large-Scale Coast Evolution, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with Ryszard B. Zeidler, p446-461

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Cooperative Ground-Water Resources Management: Local Perspective, WR Nov./Dec. 94, p984-991

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Pugh, Clifford A.

Fundamentals and Advancements in Hydraulic Measurements and Experimentation, 1994, 0-7844-0036-9, 546pp.

Pugliese, Albert

see Sand, Wolfgang, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994),

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Trapped in an Elevator during the World Trade Center Bombing: A Personal Account, CF Nov. 94, p217-228

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Bridge Pier Scour Equations - An Assessment, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Sarfaraz A. Ansari, p61-67

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Prediction and Verification of Atrazine Adsorption by PAC, with Samer S. Adham, Vernon L. Snoeyink and Ben W. Lykins, Jr., EE Jan./Feb. 94, p202-218

Analysis and Design of a Double Layer Barrel Vault with a Large Span, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with Zu Yan Shen, p401-408

Spring Deposits and Late Pleistocene Ground-Water Levels in Southern Nevada, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2530-2537

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Natural Decay Resistance of Glued-Laminated Beams, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Kevin A. Flynn, William A. Dost and Mark G. Dietz, p707-712

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Adaptive Numerical Methods for Transport Dominated Processes, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p114-126

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Evolution of an Endangered Species Study-The Ouachita Madtom, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Fred C. Pinkney, p846-849

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Phase Equilibria in the CaO - Al₂O₃ - SiO₂- H₂O System in Relation to Blended HAC Cements, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shon-deep L. Sarkar, ed., 1994), p615

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Reliability Analysis of Water Distribution Systems, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p45-55

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Dry Storage and Transportation of Failed Fuel, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Brandon D. Thomas, p949-954

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Estimation of Spillway Free Jet Trajectory Lengths, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Diana Hurdowar-

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Force and Pressure Measurements in Spillway Plunge
Pools, (Hydraulic Engineering '94, George V. Cotroneo,
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Energy Dissipation and Sediment Transport in Large Scale Tests, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with Y. Wu, p742-754

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Seismic Strengthening of URM Buildings with Steel Brac-ing, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Subhash C. Goel and William T. Holmes, p809-814

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Wave Setup Near a Seawall: Experiments and a Numerical Model, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), with J. W. Kamphuis, p835-848

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Fatigue Cracking and Rutting in Flexible Pavements, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p132-146

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see Iyer, Srinivasa L., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p743-750

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Navigation of an Autonomous Robot Vehicle, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), with David G. Armstrong, II and Carl D. Crane, III, p44-51

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Integrated Spacecraft Environments Model (ISEM), (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with Tim Gordon, p609-617

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Multiobjective Optimization of Actively Controlled Structures, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p276-285

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Dynamics of Laminated Plates with Layer Waviness, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p109-115

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Airports and Air Quality Issues - the European Perspective, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), with Roger L. Wayson, William Bowlby and James W. S. Longhurst, p193-210

Representing Design Cases Based on Methods, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with B. Kumar and I. A. McLeod, p255-292

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Development of Stochastic Indicator Models of Lithology, Yucca Mountain, Nevada, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Thomas H. Robey, p2510-2519

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Requirements for Applications of Robotics and Automa-tion in Highway Maintenance and Construction Tasks, (Robotics for Challenging Environments, Laura A. Dem-setz, ed. and Paul R. Klarer, ed., 1994), with S. A. Velinsky and T. H. West, p356-364

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Marina Ashdod, Israel - An Investor's Turn-Key Project Design, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994),

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Construction of Intertidal Mudflats as a Beneficial Use of Dredged Material, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), with D. G. Clarke, T. P. Wilber and T. J. Fredette, p946-955

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The Safety Advisor: An Interactive Object-Oriented Program for Assessing the Safeness of Roadway and Roadside Designs, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p341-348

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Application of Virtual Reality to Space Robotics Opera-tions, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), with Ken J. Ruta and Bradley N. Bell, p19-27

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US Hurricanes of 1992 an Australian Perspective, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), with Doug Meecham, p642-651

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Shear Design Guidelines for Polyester Concrete Using Recycled Plastic, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with S. P. Serhal and D. W. Fowler, p821-826

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Construction Use of Polyester Composite Using Recycled PET, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p80-87

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Modeling Municipal Water Demands for a Pump Station Area, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Jerry Rogers, Theodore Cleveland, Lu-Chia Chuang and Kathlie Sheu, p65-68

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Recovery and Recycling of Copper from Wastewater using Iron Coated GAC, (Critical Issues in Water and Waste water Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p392-399

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Genetic Algorithms in Groundwater Management, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p293-297

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Electronic Yellow Pages for Pre-trip Planning Systems, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Ryuichi Kitamura and Paul P. Jovanis, p1516-1523

Voice Operated Information System (VOIS) for Electronic Pages Information System, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Ryuichi Kitamura and Paul P. Jovanis, p1524-1531

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Image Analysis of Surf Zone Hydrodynamics, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with A. Rodriguez, E. Bahia, A. Falqués, V. Gracia, A. Sánchez-Arcilla and M. J. F. Stive, p350-365

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Sheet Flow Resistance of Asphaltic Pavements, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with John C. Warner and Richard S. Huebner, p1100-1104

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The Effects of NOM and Coagulation on Copper Corro-sion, (Critical Issues in Water and Wastewater Treat-ment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with Marc Edwards, p26-33

Seepage through Dike Walls of the Chicago Confined Disposal Facility, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), with S. A. Savant-Malhiet, L. J. Thibodeaux, K. T. Valsaraj and T. E. Myers, p1490-1496

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Flexible Extracation of Practical Knowledge from Bridge Databases, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Steven J. Fenves and Eswaran Subrahmanian, p1014-1021

Towards Practical Machine Learning Techniques, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p885-892

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Geographically Distributed Decision Support; The Tennes-see Valley Authority (TVA) TERRA System, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Peter Ostrowski, Jr. and Stephen C. Wehrend, p311-314

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Actinide Recycling For Reactor Waste Mass and Radiotoxicity Reduction, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with T. Maldague, S. Pilate, J. Journet, M. Rome, A. Harislur and J. Vergnes, p1682-1689

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The Role of Transportation Control Measures in Reducing Air Pollution: MPO Views, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), with David T. Hartgen and Walter E. Martin, p44-58

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Recycling Portland Cement Concrete Pavement at the Contractor's Option, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p86-91

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Shaffer, Thomas F., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Anita Mandal, p696-704

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Construction Technologies for Sewer Rehabilitation, with Jorge A. Vanegas and Abdul H. Khan, CO Sept. 94, p467-487

Multi-Attribute Rehabilitation of Storm or Combined Sewer Systems, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), with Jacques W. Delleur and Jorge A. Vanegas, p55-72

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Space Commercialization: Problems of Law and Policy, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1462-1470

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see Everest, William R., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p770-773

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Rhodes, Carol J.

see King, John F., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p868-876

Rhodes, David G.

Anomalous Measurements in a Compound Duct, (Funda-mentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), with Donald W. Knight, p311-320

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Integrated System for Managing Owner-Directed Project Acceleration, with David Arditi and Jamshid Mohammadi, CO Mar. 94, p77-95

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Performance of Metal-Plate-Connected Wood Truss Roof Systems During Hurricane Andrew, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), with Michael H. Triche and Charles Hoover, p632-641

see Wolfe, Ronald W., (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p652-662

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see Katopodi, I., (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p837-851

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Energy Dissipation for a RCC Stepped Spillway, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Kem C. Kadavy, p548-552 Protection Against Scour at SAF Stilling Basins, with Kem

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Effects on River Mechanics Due to Reduction in Low-Season Discharge, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p115-119

Practical Method for Calculating Contraction Scour, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with J. R. Richardson, p6-10

Sediment Measurement Instrumentation A Personal Perspective, (Fundamentals and Advancements in Hydrau-lic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p94-103

see Lagasse, P. F., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p36-40

see Richardson, J. R., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1-5

Richardson, J. R.
Practical Method for Scour Prediction at Bridge Piers, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with E. V. Richardson, p1-

see Richardson, E. V., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p6-10

see Schall, J. D., (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p114-118

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Expected Reaction to Various Options for Spent-Fuel Storage, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Christopher Charles and Ausra M. Richards, p98-

Kent, Edward, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Vijay Panchang, p56-60

see Kane, Dan, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p351-357

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Technical Area 5 - Dredging Research Program, (Dredging 94, E. Clark McNair, Jr., ed., 1994), p1-10

see Fletcher, C. H., (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p746-755

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see Schroeder, Mark E., (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p186-195

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see Taylor, J., (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p93-111

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An Alternative Equation for the Mean Velocity in Gravel-Bed Rivers and Mountain Torrents, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p672-676

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Impacts of Repository Thermal Loading on System Cost, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with W. W. Matyskiela, p586-591

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see Barr, Charles F., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p40-47

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Seismic Response and Retrofitting of Non-Ductile Rein pismic Response and Retrofitting of Non-Ductile Reinforced Concrete Bridges, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Yueh-Shiun Yang and M. J. Nigel Priestley, p1226-1231

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Inelastic Link Element for EBF Seismic Analysis, with Egor P. Popov, ST Feb. 94, p441-463

Seismic Performance of Steel-Encased Composite Col-umns, with Shannon D. Paboojian, ST Aug. 94, p2474-

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Riedl, Stephen

Optical Remote Sensing of Wave Surface Kinematics, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), with Richard Seymour and Jun Zhang, p943-950

Disaster Debris Management and Diversion from Hurri-cane Iniki, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), with Brenda Osterhaug and Dale Burton, p548-557

see Ellerbroek, James W., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p336-340

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Sensing and Control for Robotic Masonry, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), with Leonhard E. Bernold,

Riley, David R.

see Sanvido, Victor E., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p786-789

A New Automated System for Decision Support in the Construction Industry, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with C. J. Pickering, p523-530

Riley, Michael

Groundwater Model Simulation of Chemical Transport from a Nearshore Confined Sediment Disposal Facility, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with Gopal Biswas, Charles Boatman, Robert Brockhaus, Mark Utting and Doug Hotchkiss, p1517-1526

Riley, Michael A.

Kiley, Michael A.
Hybrid Structural Control for Seismic Safety, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), with Haluk Aktan, Satish Nagarajaiah and Andrei M. Reinhorn, p307-316

Riley, Michael J.

Building Product Model, A First Brick in Computer Inte-grated Construction, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Hamid H. R. Sabet, p767-777

Riley, Mike

see Jones, Barry, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p79-87

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Systems Engineering Applied to the Development of the Yucca Mountain Project Design Requirements Documents, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Dennis C. Royer, p1634-1640

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see Ligteringen, H., (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p168-186

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Innovations in Glulam Timber Bridge Design, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Thomas G. Williamson and Russell C. Moody, p1298-1303

LRFD Provisions for Wood Bridges, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Andrzej S. Nowak, p549-554

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Herbicide Leaching in a Coastal Plain Soil, with R. W. Scarborough and A. E. M. Chirnside, IR May/June 94, p634-649

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Functional Analysis of the Envelope Design Process for Integrated Building Design, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Claude Bédard, Kinh H. Ha and Paul Fazio, p71-78

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Risk-Based Management of Uncertainty During Project Planning and Execution, (Computing in Civil Engineer-ing, Khalil Khozeimeh, ed., 1994), with Juan J. Ferrada, p384-389

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Comparison of a Wave Transformation Model with LIP-11D Data, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with Agustín S.-Arcilla and Dénes Beyer, p518-532

Propagation of Linear Gravity Waves Over Slowly Varying Depth and Currents, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), with Agustín S.-Arcilla, p518-532

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Interpretation of Nondestructive Integrity Tests Using Artificial Neural Networks, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1346-

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see Hadjerioua, Boualem, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p989-993

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Rizos, D. C.

see Karabalis, D. L., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1115-1122

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Site Characterization by Artificial Neural Networks, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with David E. Dougherty and Theodore P. Lillys, p250-253

Biological Fluidized Beds Containing Widely Different Bioparticles, with Johannes B. Neethling, EE Nov/Dec. 94, p1416-1426

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A Quasicrystal for Denmark's Coast, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1045-1052

Simulated Circulation and Transport in Adjacent Wind-Driven Estuaries in North Carolina, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), with Jerad D. Bales, p105see Ziegler, C. Kirk, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p447-460

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Tank Waste Information Network System (TWINS), (High Level Radioactive Waste Management, High Level Ra-dioactive Waste Program Committee, 1994), with Jim Brown and Dana S. Roberson, p1731-1738

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Electrical Properties of Topopah Spring Tuff as a Function of Saturation, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Wunan Lin, p2112-2120

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Regulatory Issues Associated with the Multi-Purpose Can-ister (MPC) System, (High Level Radioactive Waste Management, High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Robert G. Morgan, Mary L. Birch and Linda J. Desell, p1161-1167

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Innovative Design of a Multiport Diffuser, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), with Bernadette H. Kolb, p56-65

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New Techniques for Experimental Studies for Dredged Material Dispersion, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with Adrian Ferrier and B. H. Johnson, p1192-1200

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Missouri River Recreation Economic Analysis, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with R. Scott Jackson, p681-685

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Modeling Heretogeneous Unsaturated Porous Media Flow at Yucca Mountain, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2678-2684

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Vietnam: Taming the Tiger, WP Spring 94, p6-8

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Influence of a Sand Layer on Headcut Advance, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Gregory J. Hanson, p431-435

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Chicago's Waterfalls, CE July 94, p36-39 Malaysia's Twins: High-Rise, High Strength, CE July 94,

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Bridge Fabrication Error Solution: Developing a Knowledge-Based Expert System for a State Department of Transportation, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Michael R. Hess, p1687-

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Air-Permeability Measurement for Soil at Low and High Pressure, with Bruce A. DeVantier and Braja M. Das, EE Sept./Oct. 94, p1337-1343

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see López-Almansa, F., EM Aug. 94, p1761-1772

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A Human Factors Approach to Waste Form Design, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p684-690

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see Seim, Charles, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p763-771

Fluid Inclusion Studies of Calcite Veins from Yucca Mountain, Nevada, Tuffs: Environment of Formation, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Joseph F. Whelan and David T. Vaniman, p1854-1860

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see Leon, Roberto, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1490-1495

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see S.-Arcilla, A., (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p488-502

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see Hamm, Luc, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p503-517

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see Burgess, Edward H., (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p184-193

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Impact of Weight Falling onto the Ground, with Eduardo Kausel, Vicente Cuellar, Jose L. Monte and Julian Valerio, GT Aug. 94, p1394-1412

Rogers, C. A.

Recent Developments in Physical Testing of Aggregates to Ensure Durable Concrete, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), with S. A. Senior, p338-361

Rogers, C. D. F.

disc. (of Human Factors in Civil and Geotechnical Engineering Failures, by George F. Sowers, GT Feb. 93, p238-256) with T. A. Dijkstra and I. J. Smalley, GT Aug. 94, p1446-1448

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Grazing for Funding: Agency Hydrodiplomacy, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with J. E. Robinson, p561-564

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Reducing the Long-Term Effects of Zero-Gravity, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with Sarah Coleman, p833-836

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see Jeng, Kathlie Suyn, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p77-80

see Reddy, Bindu, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p65-68

Rogers, Jerry R.

Revenue Enhancement for Water and Wastewater Systems, with William P. Bullock, Jr., ed., 1994, 0-7844-0030-X, 35pp.

Rogers, Thomas H.

see Smith, Lois S., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1372-1379

Rogner, John D.

Laws and Regulations Regarding Wetland Mitigation and Mitigation Banking, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p333-341

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Damage Mechanisms and Influence of Gradation for Steep Riprap, with Mahrez Ben Belfadhel, Oscar Dascal and Guy Lefebvre, GT Mar. 94, p514-527

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Environmental Modeling of Coastal Wetlands, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), with Robert A. Evans, p522-535

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see Betaque, Andrew D., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p466-473

see Kulkarni, Ajay B., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p161-168

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see Borst, W. G., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p896-905

Rollins, Kyle M.

Identification and Characterization of Collapsible Gravels, with Ralph L. Rollins, Trevor D. Smith and George H. Beckwith, GT Mar. 94, p528-542

In-Situ Deep Soil Improvement, Geotechnical Special Publication No. 45, 1994, 0-7844-0058-X, 150pp.

Mitigation Measures for Small Structures on Collapsible Alluvial Soils, with G. Wayne Rogers, GT Sept. 94, p1533-1553

U.S. Experience with Dynamic Compaction of Collapsible Soils, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), with Ji-Hyoung Kim, p26-43

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see Augenbroe, Godfried, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1196-1203

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see Renard, A., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1682-1689

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Combined Stormwater Drainage and Treatment, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1229-1231

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Rönnkvist, Erika

Development of a Mechanical Alcove Excavator for the Yucca Mountain Exploratory Study Facility, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with James E. Friant and Levent Ozdemir, p411-416

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see Meehan, Richard L., EI Apr. 93, p138-146

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see Klancnik, Fred, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p7-19

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Amplified Microbending in Coated Optical Fibres, EM Apr. 94, p917-921

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Mineral Admixtures in Cements for General Use and Special Purposes, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p236-242

Rosa, Alan M.

ATLSS Connectors in Semi-Rigid Composite Connections, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Le-Wu Lu and B. Vincent Viscomi, p1149-1154

Rosati, James, III

Measurement and Analysis of Wave Data in Los Angeles-Long Beach Harbors, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), with Paul T. Puckette, p223-235

Silent Inspector - An Aid to Dredge Inspection, (*Dredging* '94, E. Clark McNair, Jr., ed., 1994), with Timothy L. Welp, p756-763

Roschke, Paul N.

Validation of Knowledge-Based System with Multiple Bridge Rail Experts, TE Sept./Oct. 94, p787-806

Rose, Jerry G.

Asphalt Applications for Railroad Maintenance and Construction, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p617-626

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see Keith, Edward L., CF Aug. 94, p178-191

Rose, M. R.

see Graybill, Donald A., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2569-2573

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The Case for Retrievable High-Level Nuclear Waste Disposal, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1774-1781

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see Harpman, David A., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p553-556

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see Latimer, Richard W., (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p509-521

Rosenbalm, Larry

see Rougeau, Al, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p288-294

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see Whipple, William, Jr., (National Water Resources Reg-ulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p258-271

Rosner, Charles N.

see Hassan, Nahla K., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p1018-1025

Rosowsky, D. V.

see Hong, P., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1088-1093

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Calibration of Current Factors in LRFD for Steel, with Ahmed F. Hassan and N. V. V. Phani Kumar, ST Sept. 94, p2737-2746

see Philpot, Timothy A., MT Nov. 94, p578-594

see Sierakowski, R. L., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p139-146

Ross, C. Allen

see Tedesco, Joseph W., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p245-

Ross, Robert J.

Nondestructive Evaluation of Wood, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Roy F. Pellerin, p1233-1241

Ross, Timothy

Decision-Making Paradigm for Risk Assessment of Hazardous Wastes Using Fuzzy Sets, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Joseph Trumm and Sunil Donald, p200-207

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Stresses Induced by Surficial and Deep Loading in Elastic Medium, with Gabriel Auvinet, GT Aug. 92, p1241-1246

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Rosser, Mark

Hydraulic Analysis of the Water Distribution System, Vail Valley Consolidated Water District, Vail, Colorado, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), with Kevin W. McBrien, p452-472

Rossi, Pierre

see Casanova, Pascal, (Analysis and Computation, Franklin

Y. Cheng, ed., 1994), p223-229

see Toutlemonde, François, (Structures Congress XII, N. C.
Baker, ed. and Barry J. Loodno, ed., 1994), p227-232

Rossman, Lewis A.

Modeling Chlorine Residuals in Drinking-Water Distribu-tion Systems, with Robert M. Clark and Walter M. Gravman, EE July/Aug. 94, p803-820

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Bridge Rail Impact Forcing Functions, (Structures Con-gress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Ronald K. Faller, p91-96

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Application of Heavy Duty Roadheaders for Underground Development of the Yucca Mountain Exploratory Study Facility, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Levent Ozdemir and David M. Neil, p395-402

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Drivetrain Design, Incorporating Redundancy, for an Autonomous Walking Robot, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), with Kevin Dowling, p184-192

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see Das, Prabir, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p755-760

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Roth, Mary J. S.

Application of a Geographic Information System to Evaluate Environmental Hazards, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Deborah L. Shaffer and Roger Ruggles, p265-272

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see Jäppelt, U., (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p917-926

Rothnie, John

see Lary, Jo A., (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p92-101

Rothstein, Eric

see Gregg, Tony T., (Revenue Enhancement for Water and Wastewater Systems, Jerry R. Rogers, ed. and William P. Bullock, Jr., ed., 1994), p1-7

Rougeau, Al
OTF Kinematic GPS Positioning for Vertical Reference
Datum, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with Dean Pottle and Larry Rosenbalm, p288-294

Roumasset, James

see Chakravorty, Ujjayant, WR Nov./Dec. 94, p819-835

Rouphail, Nagui M.

Data Fusion for an ATIS Operational Test: Description and Computational Issues, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Peter Nelson, p1532-1535

Rousseau, Joseph P.

A Gas Sampling System for Withdrawing Humid Gases From Deep Boreholes, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with William Thordarson and Mark A. Kurzmack, p2139-2145

Results of Prototype Borehole Instrumentation at the Hydrologic Research Facility, Area 25, NTS, (High Level Radioactive Waste Management, High Level Radioac tive Waste Program Committee, 1994), with Mark Kurzmack and Alison Greengard, p2764-2773

see Balch, A. H., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2797-2803

see Kume, Jack, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Com-

mittee, 1994), p2076-2083

see Loskot, Carole L., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2084-2091

Rousset, Hélène

see Levoy, Franck, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p727-741

Routson, Mark R.

The Kinematic Design of a Robotic Large Space Structure Construction Service, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), with Jackson C. S. Yang and Thomas C. Taylor, p229-238

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Uncertainty versus Computer Response Time, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p263-273

Rowiński, Paweł

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Roy, Ajit K.

Waste Package Materials Selection Process, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Robert L. Fish and R. D. McCright, p993-999

Roy, Amitava

By-Product of Sulfur Recovery from Phosphogypsum as Concrete Aggregate, with Gary R. Byerly and Roger K. Seals, MT Nov. 94, p439-452

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disc. (of Unified Design of Horizontal Circular Curves, by Said M. Easa, TE Jan./Feb. 93, p94-110), TE July/Aug. 94, p686-687

Rov. B.K.

Geometric Design of Compound Horizontal Curves, TE July/Aug. 94, p674-683

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see Silsbee, M. R., (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p193-209

Royer, Dennis C

see Rindskopf, M. Sam, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1634-1640

Rozas, Lawrence P.

Developing Design Parameters for Constructing Ecologically Functional Marshes Using Dredged Material in Galveston Bay, Texas, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with Roger J. Zimmerman, p810-822

Rozier, Robert see Hollaway, William R., (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-ing 1004) n1137-1142

Ruane, Jim

see Shiao, Ming, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p45-48

Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, (Orville T. Magoon, chmn.)

Reconstruction of the West Breakwater at Port Sines, Portugal, 1994, 0-7844-0044-X, 443pp.

Rubeiz, Camille G.

Pre-Engineered Short Span Steel Bridges, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Charles D. Gorman, p1082-1087

Rubin, Robert A.

Liability Insurance for Design Professionals: Can't Live With It, Can't Live Without It?, ME Mar./Apr. 94, p18-

see McShane, C., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N.

Tuvel, ed., 1994), p746-749

see Tressler, R., (Water Policy and Management: Solving
the Problems, Darrell G. Fontane, ed. and Harry N.

Tuvel, ed., 1994), p750-753

Rudnicki, James D.

In Situ Photothermal Deflection Spectroscopy of Uranium Dioxide Dissolution, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Richard E. Russo and David W. Shoesmith, p2609-2615

Ruessink, B. G.

see Hoekstra, P., (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p402-416

Ruesta, P.

see Townsend, F. C., (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p182-185

Ruff, James F.

Air Concentration Measurements in Highly-Turbulent Flow on a Steeply-Sloping Chute, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Kathleen H. Frizell, p999-1003

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see Roth, Mary J. S., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p265-272

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see Fu, Paul, (Critical Issues in Water and Wastewater
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Reliability of Short and Slender Reinforced-Concrete Columns, with J. Cipriano Aguilar, ST June 94, p1850-1865

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Tonnes Dry Solids Reviewed, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with Kees d'Angremond and Gerard Ottevanger, p673-682

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see Cotroneo, George V., ed., Hydraulic Engineering '94

Runesson, Kenneth

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see Katopodi, I., (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p837-851

Russakow, Jeff

Generalized Object Control and Assembly for Space Robots, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), with Stephen Rock, p149-157

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Automated Corrective Action Selection Assistant, with Aminah Fayek, CO Mar. 94, p11-33

Russell, Bruce W.

Design Guidelines for the Use of Debonded Strands, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Ned H. Burns, p618-623

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Comparative Analysis of Three Constructability Approaches, with John G. Gugel and Michael W. Radtke, CO Mar. 94, p180-195

Constructability Related to TQM, Value Engineering, and Cost/Benefits, with Kevin E. Swiggum, Jeffrey M. Shapiro and Achmad F. Alaydrus, CF Feb. 94, p31-45

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Russell, Sean

Solar Power Satellites, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p793-798

Russo, Edwin P.

Shear-Stress Distribution in Symmetrically Tapered Canti-lever Beam, with Gregory Garic, ST Nov. 92, p3243disc: Victor H. Cortinez, ST Feb. 94, p676-678

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see Rudnicki, James D., (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-gram Committee, 1994), p2609-2615

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see Read, David A., (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p19-27

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Ryan, Joseph N.

Critical Issues in Water and Wastewater Treatment, with Mare Edwards, ed., 1994, 0-7844-0031-8, 825pp.

see Holtan, Tom, (Marinas, Parks and Recreation Devel-opments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p292-299

Rvan, Patrick J.

see Lee, C. Liang, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p538-542

Ryan, William L.

The World is Coming to an End: E. B. Rice Memorial, CR Sept. 94, p87-92

Saada, Adel S.

Fracture Mechanics and Plasticity in Saturated Clay, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), with Liqun Liang and Gary F. Bianchini, p21-39 see Figueroa, J. Ludwig, GT Sept. 94, p1554-1569

Saadatmanesh, H.

see Jin, L., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p753-763

Saatcioglu, M.

see Azizinamini, A., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p444-449

Saatcioglu, Murat

High-Strength Concrete Columns in High-Rise Buildings, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p37-42

see Sheikh, Shamim A., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p432-437

Saathoff, Doug

see Verduin, John R., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1388-1399

Saathoff, Patrick

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see Finno, Richard J., (Vertical and Horizontal Deforma-tions of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1482-1493

Sabet, Hamid H. R.

see Riley, Michael J., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p767-777

Sabnis, Gajanan M.

Punching Shear of Reinforced Concrete Shell Structures, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with Amjad A. Shadid, p907-916

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Sabol, S. A.

see Lagasse, P. F., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p36-40

Sabur, M. A.

disc. (of Computation Method for Regulating Unsteady Flow in Open Channels, by Fubo Liu, Jan Feyen and Jean Berlamont, IR Sept./Oct. 92, p674-689) with P. M. Steffler, IR May/June 94, p686-688

Sachs, Jeffrey R.

Implementation of a Viscoplastic, Kinematic Hardening Constitutive Model for Impact Prediction, (Engineering, Construction, and Operations in Space IV, Rodney G, Galloway, ed. and Stanley Lokaj, ed., 1994), with Charles S. White and Frederick C. Taverner, p388-401

Sack, Dennis A.

In-Situ Nondestructive Testing of Buried Precast Concrete Pipe, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Larry D. Olson, p499-507

Sack, R. L.

see Ebrahimpour, A., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1385-

see Kuo, C. C., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p387-392

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Design and Construction of the Cable-Stayed Wooden Space Truss Roof, (Spatial, Lattice and Tension Struc-tures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with Hong Wan, p810-819

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see Grindrod, Peter, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2069-2075

Sadeh, Willy Z.

A Generic Inflatable Structure for a Lunar/Martian Base, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with Marvin E. Criswell, p1146-1156

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see Semon, Jeannette, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p428-435

Sadick, Thomas E.

see Prentice, Mark, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p114-121

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see Nitivattanannon, Vilas, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p110-114

Saeki, Ken-ichi

see Nezu, Iehisa, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p406-415

Saether, Kolbjorn

Flat Plates with Regular and Irregular Column Layouts.1: Analysis, ST May 94, p1563-1579

Flat Plates with Regular and Irregular Column Layouts.II: Numerical Evaluations, ST May 94, p1580-1598

Safak, Erdal

Prediction of Structural Response to Large Earthquakes by Using Recordings From Smaller Earthquakes, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1391-1396

Şafak, Erdal

Structural Response to 3D Simulated Earthquake Motions in San Bernardino Valley, with Arthur Frankel, ST Oct. 94, p2820-2839

Saffir, Herbert S.

Critique of Commercial Structures, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994),

Shelters for Hurricane Refuge, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p241-248 disc. (of The Winds of Change?, by Paul Tarricone, CE

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Sagar, Budhi

see Eisenberg, Norman A., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1451-1460

see Gureghian, A. Berge, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1622-1633

see McCartin, Timothy, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1469-1479

see Park, James R., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1461-1468

Sagert, Per

see Björnsson, Hans C., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1405-1411

Saghafian, Bahram

see Ogden, Fred L., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p237-241

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Saiidi, M.

Behavior of Graphite/Epoxy Concrete Composite Beams, with F. Gordaninejad and N. Wehbe, ST Oct. 94, p2958-2976

Prestress Force Effect on Vibration Frequency of Concrete Bridges, with B. Douglas and S. Feng, ST July 94, p2233-2241

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see Spencer, B. F., Jr., (Analysis and Computation, Frank-lin Y. Cheng, ed., 1994), p327-336

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The IAEA's High Level Radioactive Waste Management Programme, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2279-2283

Saito, H.

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Saito, Hiroshi

Demands and Satisfiers for Automation and Robotics in Construction: Differences Between Japan and the United States, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), with John G. Everett, p419-426

Water-Quality Data Management: Survey of Current Trends, with Neil S. Grigg and Robert C. Ward, WR Sept./Oct. 94, p587-612

Saitoh, Masa

Experimental Study on the Strut Type of Cable Net Membrane Structures, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with Akira Okada, Hiroaki Tabata and Toshio Mochizuki, p573-582

Study on Mechanical Characteristics of Light-weight Complex Structure Composed of a Membrane and a Beam String Structure, (Spatial, Lattice and Tension Struc-tures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with Akira Okada, Katsuo Maeiima and Tetsuo Gohda, p632-641

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Saka, Toshitsugu

Buckling Behavior of Square-and-Diagonal Double-Layer Grid, with Yoshiya Taniguchi, ST Apr. 94, p1088-1102 Collapse Behavior of Double-Layer Space Truss Grids with Member Buckling, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with Yoshiya Taniguchi, p529-538

see Fujimoto, Masumi, (Spatial, Lattice and Tension Struc-tures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p509-518

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Scale Effect on Impulsive Wave Forces and Reduction by Scale Effect on Impulsive Wave Forces and Reduction by Submerged Breakwater, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with Masaharu Ogaswawara, p628-641 see Kajima, Ryoichi, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus,

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Sediment Transport Analysis Rio Grande Floodway at San Marcial Gauge, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1115-1119

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Predicted Load-Settlement Behavior of Spread Footings on Sand, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), with Loren R. Anderson, Joseph A. Caliendo, Abdel Agallouch, Hogan Chang, Chia-Ching Lin, Elhassan Elhassan, Kyle Gorder, Roger Greaves, Makarand S. Jakate, Won C. Kim, Arthur L. Moss and Darrin Sjoblom, p232-235

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Horizontal and Vertical Movements of Bridge Piers Subjected to Ship Impact, (Vertical and Horizontal Defornations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with Jaw-Nan Wang, Frank Pepe, Jr. and Michael J. Abrahams, p245-256

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Construction Facilities Audit: Quality System-Performance Control, ME July/Aug. 94, p60-65

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see Redondo, J. M., (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p350-365

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Tests for Biogenic Sulfuric Acid Corrosion in a Simulation Chamber Confirms the On Site Performance of Calcium Aluminate Based Concretes in Sewage Applications, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Thierry Dumas, Serge Marcdargent, Albert Pugliese and Jean-Louis Cabiron, p35-55

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Dynamic Response of Steel Fiber Reinforced Concrete, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Qiudong Wu, p833-838

Failures and Failure Mechanisms for Exterior Walls, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p509-518

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Comparison of Nuclear and Core Pavement Density Measurements, with Debasis Rath and Frazier Parker, Jr., TE Nov./Dec. 94, p953-966

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Restoring and Protecting Marine Habitat, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), with Wayne Young, p368-377

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Predicting Hydrologic Impacts of a Severe and Sustained Drought on the Colorado River Basin, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Benjamin L. Harding, p616-619

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Information Modeling and Applications, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Kirby A. Kuntz, Theodore D. Lynch, John I. Messner and David R. Riley, p786-789

Integrated Design-Process Model, with Kevin J. Norton,

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S.-Arcilla, A.

Coastal Dynamics '94, with Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994, 0-7844-0043-1, 983pp. The Delta Flume'93 Experiment, (Coastal Dynamics '94,

A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with J. A. Roelvink, B. A. O'Connor, A. Reniers and J. A. Jiménez, p488-502

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Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p518-532

Sareen, S. S.

Standards and Regulations for Geologic Disposal of High Level Waste: An Issues Framework, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), with S. J. Brocoum and T. A. Cotton, p1393-1396

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Fatigue Damage Accumulation Under Stochastic Stress Histories, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Naser K. Buresli and George Michaelov, p839-844

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FY93 Thermal Loading Systems Study, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), with Brent H. Thomson, p573-585

Site Characterization Plan Thermal Goals Reevaluation, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with J. C. de la Garza, p882-889

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Analysis of Potential Highway Routes to Yucca Mountain, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Emelinda M. Parentela and Michael S. Lee, p1278-1285

An Evaluation of Rail Access Routes to Yucca Mountain, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Emelinda M. Prarentela, p1270-1277

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Population Estimation Techniques for Routing Analysis, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Anil K. Chagari, p658-665

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Object-Oriented Structural Analysis with Substructures, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Jun Song, p153-160

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Clean Water Act Reauthorization: The States' Perspective, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p34-52

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Nonlinear Analysis of Stiffened Laminated Cylindrical Shells Using the Layerwise Theory of Reddy, (Engineering, Construction, and Operations in Space IV, Rodney G, Galloway, ed., and Stanley Lokaj, ed., 1994), with J. N. Reddy, p127-136

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Multi-Purpose Canister At-Reactor and Monitored Retrieval Storage, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Robert G. Eble, Jr., p1380-1386

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Objects: the CADD/GIS Common Denominator, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1764-1771

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disc. (of Two-Dimensional Water Flood and Mudflow Sim-ulation, by J. S. O'Brien, P. Y. Julien and W. T. Fuller-ton, HY Feb. 93, p244-261), HY June 94, p771-773

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Retrofitting a Regional Stormwater Facility, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p209-219

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Second Order Irregular-Wave Generation in Flumes -Computation of Transfer Functions by an Asymptotic Summation Method, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p784-797

Treatment of Nonhomogeneous Terms in Flow Models, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Chintu Lai, p522-527

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Demonstration Project for Scour Instrumentation, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), with W. R. Ivarson and T. Krylowski, p37-42

Low-Cost Bridge Scour Measurements, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), with J. R. Richardson and G. R. Price, pl 14-118

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Applications of Large Domain Hydrodynamic Models to Generate Frequency-of-Occurrence Relationships, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), with Leon E. Borgman and David J. Mark, p264-278

The Generation and Use of Site Specific Wave and Current Databases for Dredged Material Fate Predictions, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p190-

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Paleoclimate Validation of a Numerical Climate Model, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Hugh W. Church, Bernard D. Zak and Starley L. Thompson, p2746-2749

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Houdini: In-Tank Mobile Cleanup Robot, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p286-295

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A Real-Time Control Network for Robotic Mining, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p437-447

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Consolidation of Clay Layer: Hydrogeologic Boundary Conditions, with John M. McArthur and Robert E. Gibson, GT June 94, p1089-1093

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Water Resources Planning and Management: Now & Twenty Years from Now, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p219-225

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Use of Waste Rubber in Light-Duty Concrete Pavements, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with James K. Nelson, Serji N. Amirkhanian and John A. Murden, p367-374

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Modeling Ecological Impacts of Destratification, (Hydrau-lic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with David P. Hamilton and Murray C. Burling, p1321-1325

Schlaich, Jörg Glass-covered Lightweight Spatial Structures, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with Hans Schober, p1-27

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Development of Long-Term Three-Dimensional Hydrody-namics in Long Island Sound for Use in Water Quality Modeling, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1316-

Numerical Decomposition of Eulerian Residual Circulation in Long Island Sound, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p294-308

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Photocatalytic Transformations and Degradation of 2,4,6-trinitrotoluene (TNT) in TiO2 Slurries, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with Kimberly A. Gray, p751-755

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Collecting Sediment Environmental and Geotechnical Data Using an Impact Core Sampler, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p279-287

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Removal Of Chromium From Groundwater Using Permeable Barriers: An Aquifer Simulation Study, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with Stephen P. Shelton, p792-804

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When are Loads Taught? A Case Study and National Trends., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1358-1363

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Advances and Challenges in Case Based Design, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Simon F. Bailey and Ian F. C. Smith, p301-309

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Computer-Assisted Coal Mining - An Overview, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p427-436

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Modeling Issues of Copper Solubility in Drinking Water, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with Darren A. Lytle and Jonathan A. Clement, p17-25

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Transportation Capstone Design Project: Review and Fu-ture Directions, El Jan. 94, p70-89

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Planning, Assessing and Implementing Diagnostic Rehabilitation Options, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilita-tion Programs and Techniques, ASCE, 1994), p101-110

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Design Techniques for Rectangular Lunar Modules, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with Philip J. Richter and Jim Day, p176-185

A Membrane Structure for a Lunar Assembly Building, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with Philip J. Richter, p186-195

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Hurricane Iniki and Typhoon Omar Meteorology, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p84-91

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Utilizing Coordinated Billing and Metering Systems Anal-ysis to Enhance Utility Revenue on a Shared Revenue Basis, (Revenue Enhancement for Water and Wastewater Systems, Jerry R. Rogers, ed. and William P. Bullock, Jr., ed., 1994), p15-23

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Market Analysis of Marinas and Market Potentials in Asian Regions, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p238-243

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The Variability of Large Alluvial Rivers, with Brien R. Winkley, ed., 1994, 0-7844-0054-7, 467pp.

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Behavioral, Social, and Institutional Aspects of Risk Analysis, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p340-341

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Prediction of Foundation Load/Settlement Characteristics, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), with Keith Nicholls, p177-181

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Application of Dredge Monitoring Systems to Dredge Contract Administration Quality Assurance, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), with Jeffrey D. Jorgeson, p776-785

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Analysis of Prototype Long Period Waves for Los Ange-les/Long Beach Harbor Resonance Studies, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p15-27

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Multi-purpose Canister Conceptual Design Approach, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Giles G. Childress, III, James R. Thornton, David N. Summers and Alan H. Wells, p1143-1151

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Impact of Nuclear Waste Traffic on Highways, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Raj Siddharthan and Jon A. Epps, p1255-1262 see Zafir, Zia, TE Sept./Oct. 94, p821-842

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Oxygen from Lunar Soil via Fluorination, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with Stephan Lingner, Stephan Hoernes and Wolfgang Grimmeisen, p1210-1219

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Architecture and Lightweight Structures: A Methodical Design Approach, (Spatial, Lattice and Tension Struc-tures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1010-1023

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Wall Relief and Three Dimensional Suspension Sculpture Utilizing Tension and Membrane Structures, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p602-611

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Port of Sines West Breakwater Rehabilitation Repair Works (1990 - 1992), (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p205-228

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Surface Water Quality Modeling in the Rio Grande, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p778-781

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Seismic Response of Full-Scale Five-Story Reinforced-Masonry Building, with M. J. N. Priestley, G. R. Kings-ley and A. G. Kürkchübasche, ST Mar. 94, p925-946

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Seismic Performance and Retrofit of the Golden Gate Bridge, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with Tim Ingham, Ph.D. and Santiago Rodriguez, p763-771

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Laboratory Performance of Quartzite Based Stone Matrix Asphalt Mixtures (SMAM), (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Ramzi Taha and Fouad Bayomy, p635-642

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Selected Properties of High Performance Concrete, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), with Harald Justnes, Sverre Smeplass and Einar Aasved Hansen, p562-609

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Fast Monte Carlo Simulations and Safety Index Checking, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), with A. Mébarki, p260-265

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Different Methods to Compute Pollutant Dispersion Around Buildings, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Alan H. Huber,

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Biological Upflow Fluidized Bed Denitrification Reactor Demonstration Project-Stamford, Ct., (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with Thomas Sadick, Dennis Palumbo, Richard Schede, Marylee Santoro, Marvin Schneider and Steven Lesando, p428-435

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Contaminant Fate and Transport Model in Pool-and-Riffle Streams, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Dae Young Yu and Jae-Hyung Lee, p165-169

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Understanding the Modes of Failure for Sewers, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p86-100

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Building Code of Australia Expert Assistant - Putting Research into Practice, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Stephen Oakes, Philip Haselden and Ian Davidson, p1679-1686

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Molluscs as Climate Indicators: Preliminary Stable Isotope and Community Analysis, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Joseph F. Whelan, Richard M. Forester and Ted McConnaughey, p2538-2544

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Catastrophic Hurricanes May Become Frequent Events in Caribbean and Along the United States East and Gulf Coasts, (Hurricanes of 1992: Lessons Learned and Im-plications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p37-51

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A Survey of Building Performance in Hurricane Iniki and Typhoon Omar, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p446-455

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Water Reclamation Potential in Southern California to the Year 2010, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p661-664

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Preliminary Investigation Results as Applied to Utilization Radioactive Waste, (High Level Radioactive Waste Management, High Level Radioactive Waste, (Vight Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Oleg I. Petrichenko and Dmitry P. Khrushchov, p1880-1885

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Simulation Modeling Drystack Marina Facilities, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), with Kerry Simpson, p587-596

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A Field and Modeling Study of Residual Circulation in Sarasota Bay and Tampa Bay, Florida, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), with S. J. Peene, p641-655

Simulation of Flushing in Indian River Lagoon Using 1-D and 3-D Models, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), with H. K. Lee and C. E. Demas, p366-380

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LADS System, Inc. Thermal Remediation Treatment for Contaminated Sediment, (Dredging '94, E. Clark Contaminated Sediment, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), with Nancy L. Case and Gregory L. Hartman, p66-75

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The Aeolus Project: Measuring Coastal Wind and Sediment Systems, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with B. O. Bauer, R. W. G. Carter, D. Jackson, J. McCloskey, R. G. D. Davidson-Arnott, P. A. Gares, N. L. Jackson and K. F. Nordstrom, p476-487

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Uplift Resistance of Plywood and OSB Roof Sheathing, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with D. P. Mizzell and M. D. Zaitz, p1054-1059

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see Shim, S. B., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p303-306

A Decision Support System for Multi-Purpose Reservoir Operations, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with H. S. Lee, K. K. Koh, K. D. Shim and D. G. Fontane, p303-306

Development of Hydro-Scheduling Model for Optimal Joint Operation of Multi-Reservoir Systems, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with J. W. Labadie, H. S. Lee, D. K. Koh and K. D. Shim, p57-60

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Strip Foundation on Geogrid-Reinforced Clay, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with B. M. Das, V. K. Puri and S. C. Yen, p538-547

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Experimental Evaluation and Finite Element Analysis of Masonry-Infilled R/C Frames, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), with A. B. Mehrabi, M. Schuller and J. L. Noland, p84-93

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NEPA Implementation: The Department of Energy's Program to Manage Spent Nuclear Fuel, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p1532-1537

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see Rudnicki, James D., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2609-2615

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see Fallon, J. Barry, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p311-319

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see Blain, Jerry, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p734-737

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A Tunnel Boring System for the Yucca Mountain Project, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p381-385

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Proposed Test Method for Determining Bending Yield Moment of Nails, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with David G. Pollock, Jr., p918-922

Shrestha, P. L.

Modeling Kinetics of Sediment Removal in Water Columns, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with R. S. Govindaraju and G. T. Orlob, p1065-1069

Shrestha, Parmeshwar L.

Shrestna, Farmesnwar L. Hydrodynamic Modeling of San Diego Bay, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p140-144

Shrestha, S. P.

Modeling Flow in Variably-Saturated Porous Media, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with G. V. Loganathan, p429-432

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see Burt, M., (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1075-1081

Shroff, Avanti C.

Flat-Plate Repairs Using Innovative Shotcrete Applications, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Indrajit M. Mehta, p971-982

Shrouds, James M.

Conformity and the New Transportation Covenant, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p1-18

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Spatial Structures Erected out of Thin Shell Elements Fabricated on Plane Followed by Bending, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p867-

Shulley, S. B.

Fundamental Considerations of Design and Durability in Composite Rehabilitation Schemes for Steel Girders with Web Distress, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with X. Huang, V. M. Karbhari and J. W. Gillespie, Jr., p1187-1194

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A Tank Moisture Model (TAMMO) for Describing Neutroan Scan Data, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Hans Toffer and W. Todd Watson, p1102-1103

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Investigation of Performance of Bridge Abutments in Seismic Regions, with Mahmoud El-Gamal and Emanuel A.

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Settlement Prediction of Spread Footing Based on Labora-tory Test Results, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), with Tadatsugu Tanaka and Fumio Tatsuoka, p137-140

Siddiqui, M.

Removal of Bromate After Ozonation by Electron Beam Tradiation, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with G. Amy, W. Cooper, C. Kuruz and T. Waite, p654-661

see Westerhoff, P., (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p670-677

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Development of an Intergovernmental Agreement For a Major Multi-Party Recharge Project in Central Arizona, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p533-536

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see Webb, O. F., (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p572-579

Siegrist, Robert L.

see Labieniec, Paula A., EE May/June 94, p495-512

Concrete Beams with Externally Bonded Crabon Fiber Re-Materials and Methods of Repair, Kim D. Basham, ed., 1994), with C. A. Ross, J. W. Tedesco and M. L. Hughes, p139-146

Equilibrium Beach Profiles on the Catalan Coast, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with A. Lo Presti and A. Sánchez-Arcilla, p432-445

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Modeling the Seasonal Circulation in Massachusetts Bay, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), with Harry L. Jenter and Alan F. Blumberg, p578-590

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see Henkel, Christopher J., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1567-1572

Sill, B. L.

Wind Loads on Low Rise Structures: A Survey, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with T. A. Reinhold, p1030-1035

Sill, Ben L.

Critique: Rebuilding and Recovery, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p300-302

Silsbee, M. R.

The Chemistry of MDF Materials, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), with D. M. Roy, p193-209

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Geotechnical Analysis of Capped Dredged Material Mounds, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), with Horst G. Brandes, Carl J. Uchytil, Thomas J. Fredette and Drew Carey, p410-419

Silva, M. A. G.

Modeling Impact of Armour Blocks, (Reconstruction of the West Breakwater at Port Sines, Portugal, Rubble Mound Structures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p187-204

The Impact of the Doe Decision Making Process at the Waste Isolation Pilot Plant with Respect to Petroleum Reserves, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1753-1761

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see Carlson, Gary, (Critical Issues in Water and Waste-water Treatment, Joseph N. Ryan, ed. and Mare Ed-wards, ed., 1994), p460-466

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Load - Settlement Predictions for Spread Footing Event, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p141-144

Settlement of Building Foundations on Clay Soil Caused by Evapotranspiration, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with Claudette Tabib, p1494-1504

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see Baumgartner, P., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1782-1790

Simmons, Reid

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Simmons, Thomas M.

Preparation of Bid Documents for Dredging/Excavating Contaminated Sediments, Soils and Marsh Deposits at the Marathon Battery Superfund Site Cold Spring, NY, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with Gregory P. Matthews and Nick Multari, p1201-1209

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see Nocera, John J., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1220-1229

Simon, Andrew

Critical and Supercritical Flows in two Unstable, Mountain Rivers, Toutle River System, Washington, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with J. H. Hardison, III, p741-745

Width Adjustment: Relative Dominance in Unstable Alluvial Streams, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p974-

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Simonovic, Slobodan P.

Explicit Stochastic Modelling of a Reservoir for Hydro-power Production, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Rangarajan Srinivasan, p368-

Intelligent Decision Support System for Stage Discharge Analysis, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p283-286

Sustainable Management of Existing Reservoirs, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p242-

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Future Trends and Needs in Hydraulics, HY Dec. 92, p1607-1620

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Impacts of Low Flows on the Alluvial Rivers of the Southwest Region of Bangladesh, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p125-129

Simpson, Amy L.

Case Study of Modified Bituminous Mixtures: Somerset, Kentucky, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Kamyar C. Mahboub, p88-96

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Genetic Algorithms Compared to Other Techniques for Pipe Optimization, with Graeme C. Dandy and Laurence

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Petrographic and Geochemical Characteristics of a Section Through the Tiva Canyon Tuff at Antler Ridge, Yucca Mountain, Nevada, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Frank M. Byers, Jr., Beth L. Widmann and Robert P. Dickerson, p1869-1879

Control of Disinfection By-Products in Drinking Water, EE July/Aug. 94, p727-744

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Three-dimensional Modeling for Improving Construction Process Performance, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1156-1163

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Singh, Kamala K.

Asymmetric Flow into Well by Finite Elements, with Shambhu P. Dasgupta, IR May/June 94, p520-533

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Seismic Renewal of Civil Infrastructure Systems, (Structures Congress XII, N. C. Baker, ed. and Barry J. Lood-no, ed., 1994), with S. C. Liu, p1508-1513 see Liu, S. C., (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p1-13

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Developing Plans for Robotic Excavators, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p88-96

Liquefaction Characteristics of Silts, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p105-116

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Predicting the Impact from Significant Storm Events on a Hazardous Waste Site, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with Neal P. Dixon and J. Stephen Mitchell, p772-780

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Selection of Earth Retention Systems Using Expert System, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with M. Arockiasamy and A. Sinha, p418-425

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A Parameter Network and Model Pyramid for Managing Technical Information Flow, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Hollister A. Hartman, p306-314

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gram Committee, 1994), p301-305

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Stream Water-Temperature Sensitivity to Weather and Bed Parameters, with Heinz G. Stefan, HY June 94, p722-

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Habitat Considerations: Galveston Bay Demonstration Marsh, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994),

Siros, D.

A Study of Jointless Bridge Behavior, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with C. Spyrakos, p485-490

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Nonlinear Analysis of a Reinforced Concrete Folded Plate Structure, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with Stuart Swartz and Chidambaram Channakeshava, p857-866

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Anisotropy Studies on Cuboidal Shear Device, with J-L. Chameau and R. D. Holtz, GT June 93, p973-983 disc: Robert W. Day, GT Oct. 94, p1915-1916 clo: GT Oct. 94, p1916

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Seismic Behavior of Type PR Steel Frames, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Sanjiang Chen, p585-590

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Predicting Shallow Foundation Settlement in Sands from DMT, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with F. C. Townsend, p132-142

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Role of Vortex-Excited Vibrations in Damage to Power Poles in Hurricane Andrew, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), with Ahmad H. Namini, p567-576

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Dust Levitation on the Moon, (Engineering, Construction, and Operations in Space IV. Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with Nebojsa Duric and Jack O. Burns, p897-906

Engineering Implications of Levitating Lunar Dust, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1097-1105

Slattery, Kerry T. Mechanistic Model of the Creep-Rupture Process in Filamentary Composites, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p215-222

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Singeriand, Subjection of the Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p279-293

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Corrosion of HLW Carbon Steel Containers in the Vapor Phase of Salt Brines, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p963-968

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Finite Element Limit Load Analysis by the Static Approach Using Nonlinear Programming, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1936-1943

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Turbulent Velocities in a Mountain River, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p844-848

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Floating Cover Influence on Sediment Transport in Dune-Bed Channels, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Robert Ettema, p1156-1160

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see Mehta, Kishor C., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1451-1456

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Wastewater Reclamation at Davenport, Washington, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p834-837

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Shoaling of Wave Spectra in Front of Reflective Structures, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), with Steven A. Hughes, p642-656

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Smith, Hardy J.

New Approaches for Determination of Rock and Rock Mass Properties at Dredging Sites, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p259-268

Fracture Analysis of Bolted Timber Connections, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Lin J. Hu, p912-917

Smith, Ian F. C.

Prototype to Product - Challenge and Frustrations, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1695-1702

see Bailey, Simon F., CP Oct. 94, p454-468

see Schmitt, Gerhard, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p301-309

Smith, Ian M.

see Noorany, Iraj, (Stability and Performance of Slopes and Embankments II, Raymond B. Seed, ed. and Ross W. Boulanger, ed., 1992), p1244-1257

Smith, J. Bailey

see Pope, Joan, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p906-917

Smith, J. D.

Exploratory Studies Facility and Potential Repository Source Term, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p549-553

Smith, James A.

Benzene Transport Through Landfill Liners Containing Organophilic Bentonite, with Peter R. Jaffé, EE Nov./ Dec. 94, p1559-1577

see Mas, Diane M. L., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

see Miller, Andrew J., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p762-766

Smith, James E., Jr.

see Kreissl, James F., (disc), El Oct. 91, p336-350

Smith, James F.

see Smith, Charlotte D., (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p74-81

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see Kriebel, David L., (Coastal Dynamics '94, A. S .-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p233-247

Smith, Jane McKee

Numerical Model of the Longshore Current on a Barred Beach, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), with Magnus Larson and Nicholas C. Kraus, p798-812

Undertow at SUPERTANK, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p220-232

Smith, Jayme Todd

see de Neufville, Richard, CO Dec. 94, p706-719

see Abt, Steven R., HY Feb. 94, p260-267

Smith, John A. disc. (of More Than an Underground Success, by James Denning, CE Dec. 93, p42-45), CE Mar. 94, p32

Preliminary Assessment of Potential Sites for a Monitored Retrievable Storage (MRS) Facility, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), with Thomas H. Rogers, Arthur Dailey and Jeffrey R. Williams, p1372-1379

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see Makowski, Paul, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1224-1228

Smith, Marvin L.

Above and Below Boiling Thermal Loading Strategies for Large Waste Packages, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2146-2151

Smith, Michael Lee

Creating Business-Development Talent through Mentoring, ME Mar./Apr. 94, p44-47

Smith, Paul A.

Results from the Kristallin-I Performance Assessment, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Piet Zuidema, Ian G. McKinley, Enzo Curti, Ryk A. Klos, Trevor Sumerling and Dan Galson, p1648-1654

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San Francisco Bay Test Case for 3-D Model Verification, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p885-889

Smith, Philip A.

see Luther, Mark D., (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p75-106

Smith, Phillip J.

Testing Methods for Roof Systems, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p340-349

Smith, Richard D.

A Mechanism of Pool Formation and Maintenance in Forest Streams, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Robert L. Beschta, p824-828

Smith, S. Jarrell

Use of a Modified Hybrid Model to Analyze the Effectiveness of Jetties in Reducing Marina Sedimenta-tion, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with E. J. Hayter, p543-547

Smith, Susan

Developing a Public Involvement Policy for the Civilian Radioactive Waste Management Program, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Mary E. Gleason, Jane Summerson and Patricia Catherwood Reyes, p176-181

Stakeholder Involvement in the Evaluation of a Multipurpose Canister System, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Pete Bolton and Tim Dantoin, p314-1-314-6

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see Williams, Jeffrey R., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p182-187

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Human Factors Engineering Applications in the Testing of the Legal Weight Truck Cask Transportation System, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Millard Peck, III and Robert A. Sealock, p375-380

Smith, Thomas D.

Directional Wave Data - Measurements and Modeling Coast of Florida Erosion and Storm Effects Study, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), with Jon M. Hubertz, p76-89

Smith, Thomas Lee

Causes of Roof Covering Damage and Failure Modes: Insights Provided by Hurricane Andrew, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p303-312

Smith, Timothy E.

see Al-Qadi, Imad L., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p606-616

Smith, Trevor D. see Rollins, Kyle M., GT Mar. 94, p528-542

Maintenance Dredging in the River Scheldt, an Environ-mental Approach, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), with L. Meyvis and F. Wens, p499-508

Smoak, Glenn

see Mattingly, Stan, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p735-742

Smyrell, A. Gordon

Approximate Formulas for Effective Length of Steel Columns, ST Sept. 94, p2793-2801

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see McDermott, I. R., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p239-248

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see Nevels, James B., (Vertical and Horizontal Deforma-tions of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1028-1038

Snitz, Frank

State Regulation of Upland Disposal of Dredged Material in Michigan, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), with Douglas Zande and Pamela Horner, p131-140

Snitz, Frank L.

see Galloway, Jim E., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p981-990

Snodgrass, Robert A.

The Integrated Systems Approach to Facilities Management, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2199-2207

Snoeyink, Vernon L.

see Qi, Shaoying, EE Jan./Feb. 94, p202-218 see Waer, Mark A., EE Jan./Feb. 94, p190-201

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see Brannen, W. F., (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p405-414

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see Derian, Luther, CE Dec. 93, p50-53

Snyder, Barry J.

see Cumberland, Howard L., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p342-348

Snyder, James

see Flemming, Ulrich, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p446-453

So. Albert T. P.

see Tam, C. M., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1357-1364

Sobanjo, J. O.

Evaluation of Projects for Rehabilitation of Highway Bridges, with George Stukhart and Ray W. James, ST Jan. 94, p81-99

Sobey, Rodney J.

Conservation Properties of the Mild Slope and Boussinesq Equations, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p135-149

Sockalingam, Bala

Diaphragm Action of Cladding in Low-Rise Metal Buildings, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with David Montgomery, Scott Schiff and Peter Sparks, p1048-1053

Soden, Dennis L.

Urban Versus Rural Risk Perception Relating to High-Level Nuclear Waste, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p136-141

see Conary, Janet S., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p121-130

Soh, Ai-Kah

Hot Spot Stresses of Tubular Joints Subjected to Combined Loadings, with Chee-Kiong Soh, ST Feb. 93, p654-661 disc: Arno M. van Wingerde, Jeffrey A. Packer and Jaap Wardenier, ST July 94, p2257-2259 ST July 94, p2260 clo:

Soh, Chee-Kiong

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Flange Local Buckling and Behavior of I-Sections, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), with Liping Cai, p213-222

Sokolove, Robert D.

Wetland Mitigation Banks -- A Win-Win Situation, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), with P. Robert Thompson, p342-351

Soldate, Albert Mills, Jr.

Sediment Dispersion and Footprint Modeling Initial Characterization at a Deep Disposal Site, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with Kim A. Brown, p103-110

see Courtney, Catherine A., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p96-102

Solem-Tishmack, J. K.

see McCarthy, Gregory J., (Advances in Cement and Con-crete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p103-121

Determination of Look Angles to Geostationary Communi-cation Satellites, with David W. Eisemann, SU Aug. 94, p115-127

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Reduction, Reuse, and Recycling on a Future Lunar Base, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with Laura Symonds and Christine Willan, p804-810

Soltani, Mehrdad

see Cook, Ronald A., (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p799-

Soltis, Lawrence A.

see Winistorfer, Steve G., ST Dec. 94, p3577-3594

Local Scour Potential for Large Bed Material with Shallow Tailwater Depth, (*Hydraulic Engineering '94*, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Gilberto E. Urroz, p1146-1150

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Investigations of Potential Radical Interaction in the Formation of Brominated Organic Compounds in Water, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with Adam Eyring and Roger Minear, p467-475

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Numerical Simulations of the CCS under the Joint Effects of Coastal Geometry and Surface Forcing, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), with Dale Haidvogel, p216-234

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Process Model for Public Sector Design-Build Planning, with C. William Ibbs and Thomas R. Napier, CO Dec. 94, p857-874

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see Davalos, Julio F., (Spatial, Lattice and Tension Struc-tures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p67-75

Harry Seed, Liquefaction & the Gravel Drain, with Hiroshi Oishi and Katsuhiko Ito, CE Dec. 93, p58-60 disc: Robert W. Day, CE Mar. 94, p35

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see Chen, Genda, EM Mar. 94, p514-534 see Huang, C. D., EM Jan. 94, p177-196

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Velocity and Turbulence Measurement from the Illinois and Mississippi Rivers, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), with Nani G. Bhowmik,

see Xia, Renjie, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

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Control of Aging Processes in Wastepaper Fiber Reinforced Cement, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Jong-Pil Won and Jer-Wen Hsu, p539-544

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Wood Fiber Reinforced Cement Composites Under Wetting-Drying and Freezing-Thawing Cycles, with Shashidhara Marikunte and Jong-Pil Won, MT Nov. 94, p595-611

Sorrentino, F.

Measurement of Phase Compositions in Portland Cement Clinkers, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p1-14

Sorrentino, F. P.

The Influence of Kiln Atmosphere on Clinker Characteristics, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p65-

Sotani, Mehrdad

see Cook, Ronald A., ed., Hurricanes of 1992: Lessons Learned and Implications for the Future

An Automated Environment for Parallel Computing, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), with D. W. White and W. F. Chen, p193-202

Concurrent E-I Algorithm in Structural Dynamics, (Com puting in Civil Engineering, Khalil Khozeimeh, ed., 1994), p169-176

Sotiropoulos, Fotis

see Meselhe, Ehab A., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p512-516

Sotiropoulos, Sotiris N.

Theoretical and Experimental Evaluation of FRP Components and Systems, with Hota V. S. GangaRao and Ahmed N. K. Mongi, ST Feb. 94, p464-485

Soubra, Abdul-Hamid

disc. (of Seismic Bearing Capacity and Settlements of Foundations, by R. Richards, Jr., D. G. Elms and M. Budhu, GT Apr. 93, p662-674), GT Sept. 94, p1634-

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Proposed Uniform Scale for Stiffness of Unbound Pavement Materials for Pavement Design, with Kamyar C. Mahboub, TE Nov./Dec. 94, p940-952

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Breaking Wave Persistence in Parametric Surf Zone Models, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with Helen M. Wallace, p543-555

Sowers, George F.

Human Factors in Civil and Geotechnical Engineering Failures, GT Feb. 93, p238-256

disc: C. D. F. Rogers, T. A. Dijkstra and I. J. Smalley, GT Aug. 94, p1446-1448 clo: GT Aug. 94, p1448-1449

Residual Soil Settlment Related to the Weathering Profile, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1689-1702

Soydemir, Cetin

Earthquake-Induced Settlements in Silty Sands for New England Seismicity, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p77-90

Spacone, Enrico

RC Beam-Column Element for Nonlinear Frame Analysis, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), with Filip C. Filippou, p155-164

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disc. (of Knowledge Representation and Processing in Re-lational Data Base, by Teresa M. Adams, CP Apr. 93, p238-255), CP July 94, p397-398

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Spangenberg, Carl W.

see Chang, S. David, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p632-639

Galerkin Sampling Method for Stochastic Mechanics Prob-

Garetan Samping Method to A Sociastic Mechanics Prob-lems, with B. A. Zeldin, EM May 94, p1091-1106
Spectral Representation of High-Frequency Space Shuttle Data, with L. J. Mushung, D. A. Nelson, Jr. and D. A.
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Sparks, Peter

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see Sockalingam, Bala, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1048-

Sparks, Peter R.

Sparks, Feter R.
Critique on Building Envelope Sessions, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p529-532

Relationship Between Residential Insurance Losses and Wind Conditions in Hurricane Andrew, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), with Shiraj A. Bhinderwala, p111-124

Spaulding, M. L.

see Grilli, Stéphan T., (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p890-904

Spaulding, Malcolm

see Muin, Muslim, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p432-446

Spaulding, Malcolm L.

Estuarine and Coastal Modeling III, with Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994, 0-87262-975-9, 696pp.

see Kolluru, Venkat S., (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p624-640

see Swanson, J. Craig, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p200-209

Spaulding, Malcolm M.

see Huang, Wenrui, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swan-son, ed., 1994), p500-508

Spaulding, S.

see Fowler, Malinda, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p132-135

Speake, Robert C., Jr.

A Real-Time Graphical Interface to a Two-Dimensional Groundwater Flow and Mass Transport Model, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Kay S. Capps, p2081-2103

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Speck, Robert S., Jr.

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Speitel, Gerald E., Jr.

see Dvorak, Bruce I., (Critical Issues in Water and Waste-water Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p601-608

see Zhang, Jun, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p150-164

Spencer, B. F., Jr.

Digital Signal Processing Techniques for Active Structural Control, (Analysis and Computation, Franklin Y. Cheng, 1994), with P. Quast, S. J. Dyke and M. K. Sain, p327-336

Frequency Domain Optimal Control Strategies for Aseismic Protection, with J. Suhardjo and M. K. Sain, EM Jan. 94, p135-158

Spengler, R. W. The Sundance Fault: A Newly Recognized Shear Zone at Yucca Mountain, Nevada, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with C. A. Braun, L. G. Martin and C. W. Weisenberg, p2359-2366

see Buesch, D. C., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1055-1065

Spengler, Richard W.

see Dickerson, Robert P., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2367-2372

Speranski, Nikolai S.

On Some Hydrodynamic Effects Found in Large Scale Experiments, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p785-793

Speransky, N. S.

see Kuznetsov, S. Yu., (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p364-373

Sperling, Daniel

see Washington, Simon, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p118-138

Spiegler, P.

Yucca Mountain: A Potential Trade-Off in Radiological Hazards, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1959-1963

Spigolon, S. Joseph

Knowledge-Based Expert Systems For Geotechnical Factors in Dredging, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), with Reda M. Bakeer and Jack Fowler,

Spires, David B.

Numerical Modeling of Initial Ground Movement in an Instrumented Superconducting Super Collider Shaft, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Fei Duan and Marek Mrugala, p1990-1996

Shaft Performance in Taylor Marl-Field Measurements vs. Numerical Modeling, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Fei Duan and Marek Mrugala, p779-784

Spletzer, Barry L.

see Feddema, John T., (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p320-328

Spraggins, H. Barry

Policy Issues of Transporting Spent Nuclear Fuel by Rail, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p163-167

see Fanchon, Phillip, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p666-670

Sprecher, William M.

see Taylor, Edward C., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p301-305

Spring, Gary S.

Implementation of Knowledge-Based GIS: A Case Study, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1332-1338

Sproule, William J.

Aviation Crossroads: Challenges in a Changing World, 1994, 0-7844-0029-6, 220pp.

Innovative Design of Steel Gable Frames, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p337-342

Spyrakos, C.

see Siros, D., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p485-490

Spyrakos, Constantine C.

Seismic Study of Historic Bridges in Eastern United States, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Emory L. Kemp and Ramesh Venkatareddy, p380-386

Sribalaskandarajah, Kandiah

see Banerjee, Sunirmal, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p652-662

Sridharan, A.

disc. (of Ultimate Settlement by Hyperbolic Plot for Clays with Vertical Drains, by Siew-Ann Tan, GT May 93, p950-956) with K. Prakash, GT Nov. 94, p2079-2081

Sridharan, K.

see Datta, R. S. N., WR July/Aug. 94, p405-422

Sridharan, S.

see Gould, P. L., (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p927-935

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see Simonovic, Slobodan P., (Water Policy and Manage-ment: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p368-371

Srinivasan, Venkatesh

Thermal Regeneration of Spent Lithium Hydroxide, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with Bernadette Luna, p1036-1045

Sriram, D.

see Agbayani, N., ST Dec. 93, p3630-3648

see Gorti, S. R., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1591-1598

see Wong, Albert, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1481-1488

Sriram, Duvvuru

see Peña-Mora, Feniosky, (Computing in Civil Engineer-ing, Khalil Khozeimeh, ed., 1994), p1599-1606

Srisethanil, Chaisak

see Baker, Nelson C., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1059-1066

Srivastava, R. Mohan

Geostatistics for Fracture Characterization. (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Bruce M. Davis, p2131-2138

Srivastava, V. K. see Yussuff, Sheik M. H., IR Jan./Feb. 94, p97-109

St. Clair, Robin K.

see Nelson, Robert M., Jr., (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-gram Committee, 1994), p1722-1730

Staib, Joseph

Computer Based Energy Analysis for Mechanical Retrofit of Buildings, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Matt Syal and David Peters, p1349-1356

Stakhiv, Eugene L.

see Haimes, Yacov Y., ed., Risk-Based Decision Making in Water Resources VI

Stakhiv, Eugene Z.

see Haimes, Yacov Y., (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p219-233

Physical Model Tests of Dolos Impact Stresses, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with J. W. Tedesco, p67-72

Stam, Cor-Jan M.

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Water 2050-Supply for the Portland, Oregon Metropolitan Region Using the Integrated Resource Planning Process, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p230-233

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Stive, Marcel J. F.

Verification of the Shearstress Boundary Conditions in the Undertow Problem, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with Huib J. De Vriend, p533-542

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Restoration and Capping of Contaminated Sediments, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with Robert Sullivan, p1017-1026

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ISDP: Integrated Approach to Seismic Design of Reinforced Concrete Structures, with Andrew W. Taylor, ST Dec. 94, p3548-3566

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Determination of Sediment Profile for a Dry Flood Control Basin, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Scott E. Stonestreet, p1004-1008

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Bed Load Roughness in Supercritical Flow, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Ronald R. Copeland and Darla C. McVan, p747-751

Revised Hydraulic Design of the Rio Hondo Flood Control Channel, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Michael E. Mulvihill and John E. Hite, Jr., p401-405

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Predicting TCM Responses with Urban Travel - Demand Models, (Transportation Planning and Air Quality II, Thomas F. Wholly, ed., 1994), p59-75

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see Hodel, Hanspeter, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p697-701

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Chezy Formula Versus Theory and Common Sense, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p662-666

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The First Multipurpose Spent Fuel Container Reviewed by the U.S. Nuclear Regulatory Commission (USNRC), (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p467-476

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The Total System Approach to Efficient Pipeline Design, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p159-171

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Engineering of the Building Envelope "To Do Or Not To Do", (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), with Dale C. Perry, p10-30

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Agitation Dredging Environmental Study, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), with Elizabeth A. Day, p76-85

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Using CADD Application to Support Construction Activities, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Liang Y. Liu, Sangyoon Chin and Kenneth Ahn, p531-538

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Prestressed Concrete Failures Due to Uplift, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1433-1438

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Experimental Study of Undertow and Turbulence Intensity Under Irregular Waves in the Surf Zone, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), with Francis C. K. Ting, p602-613

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Some Aspects of Determination of Pile Capacity by the Wave Equation, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Wondem Teferra, p946-951

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DREDGMAP: A PC Based System to Predict the Fate of Dredged Material, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), with Malcolm L. Spaulding and Tatsusaburo Isaji, p200-209

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The Use of By-Product Gypsum in Road Construction: a State-of-the-Art Summary, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Tom Papagiannakis, Roger Seals and Donald Saylak, p170-17

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Bed Load Prediction in Steep Mountain Rivers, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Toyoaki Sawada, p810-814

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A Practical Design and Construction of Tension Rod Supported Glazing, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with Haruyuki Kitamura, Kimiaki Harada, Kohei Higuchi, Akiho Harada and Mamoru Iwata, p684-693

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The Community Options Model©: A PC Tool for Evaluat-ing Community Choices for Marinas and Tourism, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p29-38

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Computer Implementation of Fuzzy Reasoning in Tendering, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with K. C. Lam and Albert T. P. So, p1357-1364

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Use of Wastes as Fuels in the Cement Industry: Pros & Cons, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), with Márta Pátkai-Horváth, p82-102

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Analyzing Wave and Storm Surge Impacts from Hurricane Andrew on the Dade County Beach Erosion Control and Hurricane Protection Project, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), with Jon M. Hubertz, p587-596

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see Holm, Judith, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p83-87

Tardiff, Robert G.

Protecting Human Health: Keeping Science in Risk Assess-ment and Balance in Risk-Based Regulations, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p96-

Tareque, A. K. M.

see Chowdhury, Jahir Uddin, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p918-922

Tarhini, Kassim M.

Analysis of I-Girder Highway Bridges, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p684-

Tarricone, Paul

Jet Grouting Gains, CE Dec. 94, p40-43 A League of Their Own, CE May 94, p58-61

disc: James M. Force, CE July 94, p27 Let's Go to the Videotape, CE June 94, p42-45 disc: John J. Clark, CE Sept. 94, p33

The Politics of Nuclear-Waste Disposal, CE Mar. 94, p56-58

Pregame Show, CE Aug. 94, p34-37 So Much Pavement, So Little Time, CE Nov. 93, p40-43

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Tarvin, Paul A.

see Hunt, Steven W., (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), p137-154

see Sakumoto, Y., MT May 94, p169-184 see Sakumoto, Y., ST Apr. 94, p1103-1121

Tascione, Tony

Application of Computer-Aided Structural Engineering, (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p238-247

Task Committee on Lessons Learned from the Design, Construction and Operation of Hydroelectric Facilities of the Hydropower Committee, Energy Division, ASCE, (Edward F. Carter, chmn.)

Lessons Learned from the Design, Construction and Operation of Hydroelectric Facilities, 1994, 0-7844-0000-8,

Task Committee on Marinas 2000, American Society of Civil Engineers, (Fred Klancnik, chmn.)

Planning and Design Guidelines for Small Craft Harbors, Revised edition (M&R No. 50), 1994, 0-7844-0033-4,

Task Committee on Marine Fiber Rope of the Water-ways, Port Coastal and Ocean Division of ASCE, (Bill Remley, chmn.)

Glossary of Marine Fiber Rope Terms, 1993, 0-87262-896-5, 80pp.

Task Committee on Overtopping Protection of the Hy-draulics Division of the American Society of Civil Engineers, (Noel R.(Randy) Oswalt, chmn.)

Alternatives for Overtopping Protection of Dams, 1994, 0-7844-0004-0, 140pp.

Task Committee on Recommendations for Standards in Hydraulics of the Hydraulics Division of the Ameri-can Society of Civil Engineers, (George Hecker, chmn.)

Recommendations for Standards in Hydraulics, 1994, 0-87262-971-6, 170pp.

Task Committee on Urban Water Infrastructure Fail-ure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Pro-

grams and Techniques, ASCE
Urban Drainage Rehabilitation Programs and Techniques,
Edited by William A. Macaitis, 1994, 0-7844-0038-5, 223pp.

Tasker, Gary D.

An Interactive Regional Regression Approach to Estimating Flood Quantiles, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Raymond M. Slade, Jr., p782-785

Tassoulas, John L.

see Karamanos, Spyros A., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1520-1525

see Nogueira, André, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1514-

see Nogueira, André C., EM Sept. 94, p1931-1944

Tatemichi, Ikuo

see Kawaguchi, Mamoru, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p383-392

Tatsuoka, Fumio

disc. (of Undrained Shear Strength of Liquefied Sands for Stability Analysis, by Timothy D. Stark and Gholamreza Mesri, GT Nov. 92, p1727-1747), GT July 94, p1284-1287

see Ling, Hoe I., GT July 94, p1166-1184

see Siddiquee, Mohammed S. A., (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p137-140

Tatum, C. B.

see Mahoney, John J., CO Sept. 94, p617-631 see Nam, C. H., CO Sept. 92, p507-524

Tayerner, Frederick C.

see Sachs, Jeffrey R., (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p388-401

Tavolaro, John F.

Dioxin Contamination in Sediments of the Port of New York and New Jersey: The Search for Criteria, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with Joseph Olha, p150-159

Tay, Joo-Hwa

Innovative Civil Engineering Material from Sewage Sludge: Biocement and Its Use As Blended Cement Material, with Kuan-Yeow Show, MT Feb. 94, p23-33

Tayfun, M. Aziz

Distributions of Envelope and Phase in Weakly Nonlinear Random Waves, EM May 94, p1009-1025

Nonlinear Effects on Wave Envelope and Phase, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p755-768

Tayfur, Gokmen

Spatially Averaged Conservation Equations for Interacting Rill-Interrill Area Overland Flows, with M. Levent Kavvas, HY Dec. 94, p1426-1448

Taylor, Andrew W.

see Stone, William C., ST Dec. 94, p3548-3566

Taylor, Chad

Fabrication and Testing of High Strength, High Capacity, Weight Optimized Trailers, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p931-933

Taylor, Edward C.

Integrating Scientific Results for a Post-Closure Safety Demonstration, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Lawrence D. Ramspott, Scott Sinnock and William M. Sprecher, p301-305

Taylor, H. F. W.

Delayed Ettringite Formation, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p122-131

Taylor, J.

Construction of a Cofferdam Pressure Relief System, (Serviceability of Earth Retaining Structures, Richard J. Finno, ed., 1994), with W. L. Galbraith, G. Richters, J. E. Baka and C. C. Chang, p93-111

Taylor, John

see Louie, Herbert, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p442-446

Taylor, Jon Guerry

Balancing Environmental Issues when Developing the Marina Project Scope, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p69-76

Boating Needs Assessments (BNA) for Evaluating Boat Ramp and Facilities Needs, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), with James Paul Posda, p20-28

Failure Stages in Timber Fixed Piers: Design for Minimal Reconstruction After a Storm, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), with Mark D. Bolchoz, p406-413

New Guidelines for Southern Pine Uses in Coastal Marine Construction, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p480-488

A Suggested International Classification of Marinas, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p140-143

see Posda, Jim, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p414-423

Taylor, Larry L.

Performance Assessment of the INEL Spent Fuel and HLW in Two Hypothetical Repositories, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Robert P. Rechard, Henry H. Loo, Ronald D. Klinger and Leonard F. Ermold, p1508-1513

Taylor, Lawrence A.

Helium-3 on the Moon: Model Assumptions and Abundances, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p678-686

see Chambers, John G., (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p878-888

Taylor, Lawrence W., Jr.

see Shen, Ji Yao, (Dynamic Response and Progressive Failure of Special Structures, Ramesh B. Malla, 1993), p110-123

see Shen, Ji Yao, AS Oct. 94, p435-445

Taylor, Marshall R.

see Bennett, Michael, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p433-436

Taylor, Michael P.

Marathon Battery Superfund Project - A Review of Design, Construction and Lessons Learned, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), with Pamela N. Tames and Alan R. Elia, p1210-1219

Taylor, P. R.

Oxygen Generation from Synthetic Moon Soil Using a Plasma Reactor, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with S. A. Pirzada, K. A. Prisbrey, H. Gold and R. E. Hicks, pl 178–1187

Taylor, R. Bruce

see Abramian, Jorge E., (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p229-238

Taylor, Scott T.

see Obropta, Christopher C., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1047-1054

Taylor, Thomas C.

Construction Operations on the OUTPOST Platform in Orbit, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p423-432

Resource Recovery Facilities for Earth Approaching Comets, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with Anthony C. Zuppero and Lucy-Ann McFadden, p562-571

see Routson, Mark R., (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p229-238

Tchamen, G. W.

The Numerical Simulation of Wetting and drying Areas using Riemann Solvers, (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), with R. Kahawita, p127-140

Tchaou, M. K.

see Loganathan, G. V., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p197-200

Tchobanoglous, George

see Lund, Jay R., EE Sept./Oct. 94, p1082-1094

see Tajrishy, Massoud A., IR July/Aug. 94, p716-731

Teal, Martin J.

Estimation of Mean Flow Velocity in Ice-Covered Channels, with Robert Ettema and John F. Walker, HY Dec. 94, p1385-1400

Estimation of Mean Velocity for Flow Under Ice Cover, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), with Robert Ettema, p242-250 Tedesco, J. W.

see Sierakowski, R. L., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p139-146

see Stallings, J. M., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p67-72

Tedesco, Joseph W.

Load Rate Effects on Concrete Compressive Strength, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with C. Allen Ross and Mary L. Hughes, p245-251

Teegarden, T.

Statewide Consumptive Use Estimates, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with L. Pochop, G. Kerr and R. Delaney, p485-488

Teels, Billy M.

Agriculture and Soil Conservation, (National Water Resources Regulation: Where is the Environmental Pendu-lum Now?, Howard Holme, ed., 1994), p211-218

see Johnson, B. H., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p18-27

Teeter, Allen

Dredged Material Dispersion from the Vicinity of a Pipeline Discharge, Tylers Beach, Virginia, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p918-927

see Alexander, Michael P., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p304-313

Teferra, Wondem

see Svinkin, Mark R., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p946-

Teicholz, Paul

Strategy for Computer Integrated Construction Technology, with Martin Fischer, CO Mar. 94, p117-131 Technology Framework for Computer-Integrated Con-

struction, with Martin Fischer, CC Feb. 94, p1,9-11 see Fergusson, Kelly Jean, CF May 94, p89-109

see Fruchter, Renate, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1473-1480

Teicholz, Paul M.

see Khedro, Taha, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1489-1496

see Malcherek, A., (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p42-57

Tekippe, R. J.

see Wahlberg, E. J., (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p209-216

Templeman, Andrew B.

see Tanyimboh, Tiku T., (disc), WR Jan./Feb. 93, p83-98

Temus, Charles J.

Verification Testing of Multi-Purpose Rail Cask Impact Limiters, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Ian D. McInnes, Ken Miller and Robert A. Johnson, p452-456

Teng, C. C.

see Wang, David W., (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p316-329

Teng, Chung-Chu

Design Waves and Wave Spectra for Engineering Applications, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), with Gerald L. Timpe, Ian M. Palao and David A. Brown, p993-1007

see Chaffin, Joel N., (Ocean Wave Measurement and Anal-ysis, Orville T. Magoon, ed. and J. Michael Hems-ley, ed., 1994), p277-286

Teng, J. G. Out-of-Plane Buckling of Restrained Thin Rings of General Open Section, with R. M. Lucas, EM May 94, p929-

Teng. Jin-Guang

Cone-Cylinder Intersection under Pressure: Axisymmetric Failure, EM Sept. 94, p1896-1912

Plastic Collapse at Lap Joints in Pressurized Cylinders under Axial Load, ST Jan. 94, p23-45

Tenorio, Juan C.

Demonstrated Success in Reducing Risk of Losses in a Severe Hurricane: Hurricane Omar Experience, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), with Jack B. Jones, p716-725

Ternlund, John

see Garcia, Luis A., (Water Policy and Management: Solv-ing the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p291-294

Terray, Eugene A.

see Gnanadesikan, Anand, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p287-301

Terry, Wesley R.

Georgia Dome Cable Roof Construction Techniques, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p563-572

Tesar, Delbert

see Ambrose, Robert, (Robotics for Challenging Environ-ments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p239-249

Thabet, Walid Y.

Alternative Decisions for Space-Based Scheduling in Multi-Story Projects, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Yvan J. Beliveau, p1164-1171

HVLS: Horizontal and Vertical Logic Scheduling for Multistory Projects, with Yvan J. Beliveau, CO Dec. 94, p875-892

An Integrated Computer Model for Project Schedule Updating, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Ayman A. Morad, p743-

Modeling Work Space to Schedule Repetitive Floors in Multistory Buildings, with Yvan J. Beliveau, CO Mar.

94, p96-116

Representation of Vertical Constraints Knowledge for Scheduling Multi-Story Projects, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Yvan Beliveau, p349-355

Thamir, Falah

Observations of Water Movement in a Block of Fractured Welded Tuff, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Edward M. Kwicklis, David Hampson and Steve Anderton, p2020-2029

Tharaniyil, Mathew P.

see Naik, Tarun R., MT May 94, p254-263

Thatcher, M. Llewellyn

see DiLorenzo, Joseph L., (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), p86-104

Thaulow, Niels

see Geiker, Mette, (Cement Manufacture and Use, Paul W. Brown, ed., 1994), p123-136

Thayumanavan, S.

see Ramakrishna Rao, Achanta, IR Jan./Feb. 94, p60-79

Theis, Thomas L.

Optimization Studies of Anaerobic Expanded Bed Reactor Pretreatment of Domestic Wastewater, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with Bruce J. Alderman and Anthony G. Collins, p289-296 see Alderman, Bruce J., EE May/June 94, p670-676

Thendean, Gabriel

see Rausche, Frank, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p291-302

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see Yoon, C. John, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p277-284

Prospects of Vacuum-Assisted Consolidation for Ground Improvement of Coastal and Offshore Fills, (In-Situs Deep Soil Improvement, Kyle M. Rollins, ed., 1994), with E. Kavazanjian, Jr., A. Jacob and I. Juran, p90-105

see Cognon, J. M., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1237-1248

see Jacob, A., (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p1249-1261

Thevenot, Michelle M.

Verification of Numerical Modeling of the Fate of Disposed Dredged Material, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), with Billy H. Johnson, p180-189

Stable Reinforced-Concrete Section-Analysis Procedure, with B. Stojadinović, ST Oct. 94, p3012-3024

Thewalt, Chris

Performance Parameters for Pseudodynamic Tests, with Mauricio Roman, ST Sept. 94, p2768-2781

Thiagarajah, R. I.

see Thorne, Colin R., (disc), HY Dec. 92, p1607-1620

Thibodeaux, Kirk G.

see Fulford, Janice M., (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), p376-385

Thibodeaux, L. J.

Capping Contaminated Sediments - The Theoretical Basis and Laboratory Experimental Evidence for Chemical Containment, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), with K. T. Valsaraj and D. D. Reible, p1001-1007 see Reible, D. D., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1490-1496

Thibodeaux, Louis J.

"So You Want to Remediate Contaminated Mud! These are Your Five Choices.", (Dredging '94, E. Clark McNair, Jr., ed., 1994), with Danny D. Reible and Kalliat T. Valsaraj, p588-595

Thicke, Robert J.

The Daytona Beach "Large Wave" Event of 3 July 1992, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), with Robert G. Dean and Andrew W. Garcia, p45-60

Verification of Lake Superior Outflow Equations, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p462-466

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see Murillo, Juan A., CE May 94, p68-70

omas, A. P.

see Menges, C. M., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2373-2390

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see Quinn, Robert D., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p949-954

see Ramaswamy, G. S., (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p28-37

Thomas, Daniel A.

Long Term Nuclear Criticality Potential in Waste Packages, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Thomas W. Doering, p838-844

see Thornton, James R., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p823-830

Thomas, David

Spread Footing Prediction Event at the National Geotechnical Experimentation Site on the Texas A&M University Riverside Campus, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), p149-152

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Thomas, G. A. N.

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Thomas, H. Randolph

Forecasting Labor Productivity Using Factor Model, with Ahmet S. Sakarcan, CO Mar. 94, p228-239

Interpretation of Construction Contracts, with Gary R. Smith and Robert E. Mellott, CO June 94, p321-336

Thomas, Harold W.

Salt River Project Strategic Water Resource Plan, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Mark A. Emelity, p234-237

Thomas, J. Russell

see Vanier, Dana J., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p137-144

Thomas, Juliana

see Seymour, Richard, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p105-123

Thomas, Michael

Fly Ash and Alkali-Aggregate Reaction, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), p362-376

Thomas, Richard F.

Dewatering and Crust Management of Confined Disposal Areas in Galveston Bay, Texas, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1400-1405

Thomas, T. M.

see Johnson, P. E., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1242-1248

Thomas, Tom R.

see Benedixsen, C. Lee, (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-gram Committee, 1994), p343-350

Thomas, W. O., Jr.

Frequency of the 1993 Flood in the Upper Mississippi River Basin. (Hydraulic Engineering '94, George V. River Basin, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with D. A. Eash, p16-20

Thome, F.

see Schmidt, G. L., (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p729-738

Thompson, A. O.
Thermal Finite Element Analyses of 26 Waste Package Spent Nuclear Fuel Loading Configurations, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with M. J. Plinski, p796-800

Thompson, Anthony J.

Federal Risk Management Policy: Where Are the Problems?, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), p1-18

Thompson, D. J.

see Melcer, H., EE May/June 94, p588-609

Thompson, David B.

Comparison of Infiltration Equations Using Flooding Infiltrometer Data, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Margaret Medellin, p1090-1094

Thompson, Douglas M.

Hydraulics and Sediment Transport Processes in a Pool-Riffle Rocky Mountain Stream, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p849

Thompson, Edward

see Goda, Yoshimi, (Ocean Wave Measurement and Anal-ysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p963-977
see van Vledder, Gerbrant, (Ocean Wave Measurement

and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p978-992

Thompson, Edward F.

Numerical Modeling of Waves in Harbors, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), with H. S. Chen and Lori L. Hadley, p590-601

Wave Grouping in Locally Generated Seas on Short Fetches, with John Oliver, WW Mar./Apr. 94, p220-225

Thompson, J. Scott see Kunkel, James R., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p359-362

Thompson, James E.

see Derrington, Susan B., (High Level Radioactive Waste Management, High Level Radioactive Waste Pro-gram Committee, 1994), p942-948

Thompson, Ken see Fu, Paul, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p336-343

Thompson, P. Robert see Sokolove, Robert D., (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p342-351

Thompson, Paul D. see Marshall, Allen R., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1859-1866

see Austin, William G., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2429-2436

Thompson, Starley L.

see Schelling, F. Joseph, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2746-2749

Thomson, Brent H.

see Saterlie, Steven F., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p573-585

omson, N.

see Sharma, M., EE Sept./Oct. 94, p1248-1265

Thomson, Neil R.

see Duchene, Michael, WR May/June 94, p276-293

Thomson, Theodore A., Jr.

see Chajes, Michael J., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p598-605

Thordarson, William

see Rousseau, Joseph P., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2139-2145

Thorne, Colin R.

disc. (of Future Trends and Needs in Hydraulics, by Daryl B. Simons, HY Dec. 92, p1607-1620) with R. I. Thiagarajah, HY May 94, p672-676

see Darby, Stephen E., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

1994), p944-948
see Hubbard, Lisa C., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p737-741

Thornhill, Rod

Overflow Elimination Benefits from GIS Based Technology, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p829-835

Thornton, Christopher I. see Abt, Steven R., IR Nov./Dec. 94, p1098-1111

Thornton, E. B.
see Church, J. C., (Coastal Dynamics '94, A. S.-Arcilla,
ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus,
1000, 276,300 ed., 1994), p376-390

Thornton, Earl A.

Viscoplastic Response of Structures for Intense Local Heating, with J. D. Kolenski, AS Jan. 94, p50-71

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Multi-Purpose Canister Criticality Control Design Fea-tures, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Kelvin J. Montague, Alan H. Wells and Dan-

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PROSIM - A Water Rights-Based Operational Simulation Model of the Provo River, (Water Policy and Manage-ment: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Paul C. Summers and P. Kirt Carpenter, p578-581
Water Resource Modeling and Consensus Building, (Water

Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Rick J. Cox, p473-476

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Research and Development - Why bother?, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p683-688

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Uncertainty in Reservoir Operation Optimisation, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Ian C. Goulter, p363-367

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Wind Loads on Roofs of Low Rise Structures: Buffeting or Interaction, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p350-361

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Robotics and Automation for Environmental Screening and Characterization, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), with Edward W. Jaselskis, Marvin S. Anderson and Ralph E. Patterson, III, p329–331.

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Applying Dredged Material to Recreation Area Development, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), with Thomas R. Patin, p271-282

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Space Policy: Key Points of International Law, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with Teresa Laguatan, p815-819

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A Computerized Methodology for Conducting Pedestrian Gap Studies, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p2066-2072

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Constraint Management on Distributed AEC Configurations, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with H. C. Howard, p1607-1614

Transactional Support for Concurrent Finite Element Analysis & Design, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with H. R. Riggs, p798-805

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Modeling Bottom Friction in Wind-Wave Models, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p769-783

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Design of Frames Using Notional Horizontal Force, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with J. Takamatsu and N. Nishihata, p1161-1166

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Experimental Study on Unsteady Flow in Open Channels with Flood Plains, (Fundamentals and Advancements in Hydraulic Measurements and Experimentation, Clifford A. Pugh, ed., 1994), with M. Nagao and I. Nezu, p396-405

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MoveCapPlan: In Integrated System for Planning and Controlling Construction Material Laydown and Handling, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), pl 172-1179

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see Johnsen, Lawrence F., (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), p68-79

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Research on the Consolidation of Mud, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with Marc Sas, p430-439

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Toridis, Theodore G.

see Parvin, Azadeh, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1944-1950

Torkamani, Morteza A. M.

A Probabilistic Approach to the Response of Tall Buildings to Wind Loadings, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Ramadan S. Murad, p1439-1444

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Enhancing Nuclear Waste Disposal Safety by Exploiting Regional Groundwater Flow—An Exploratory Proposition, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Grant Sheng, p1797-1804

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Adaptive Space Station Technologies and Systems for a Lunar Surface Return Mission, (Engineering, Construc-tion, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with Sam Ximenes, p483-493

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Probabilistic Modeling of Scheduling Uncertainty: Methods and Tools, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p380-383

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UF Spread Footing Prediction, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994), with P.

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A Decision Support System for Administering Water Rights in an Alluvial Aquifer, (Water Policy and Man-agement: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p287-290

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A Formal Expert Judgment Procedure for Performance Assessments of the Waste Isolation Pilot Plant, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Robert V. Guzowski and Stephen C. Hora, p1745-1752

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Missouri River Least Tern and Piping Plover Model Development, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with R. Fairbanks, D. Latka, J. Glassley, K. Engel and J. Rude, p750-753

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Restoration of Wetland Ecosystems: A Challenge to Our Nation's Civil Engineers, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p229-232

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Immobilization of Heavy Metals in Cementitious Matrix, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), with F. D. Tamas, M. Patkai-Horvath and E. Zinterl, p614

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Methodology for Comparing Lunar Settlement Designs, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p969-978

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Steel Raw Water Pipeline Design Development, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), with Roger Strube and Lynn Hill, p473-491

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Interfacing GIS and Water Quality Models for Agricultural Areas, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Hector R. Fuentes and Rao K. Gadipudi, p252-256

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Object-Oriented Modeling of Design System for RC Build-ings, with Tatjana Isaković and Matej Fischinger, CP Oct. 94, p436-453

Turkiyyah, George Random Vortex Models in Wind Engineering, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Dorothy Reed and Jiyao Yang, p99-106

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Turner, Charles D.

DBP and Hardness Control by Membrane Filtration, (Criti-cal Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with Srinivasa R. Kadubandi, p344-351

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Worldwide Calibration of API RP2A-LRFD, with C. P. Ellinas and G. A. N. Thomas, WW Sept./Oct. 94, p423-433

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see Fontane, Darrell G., ed., Water Policy and Management: Solving the Problems

see Pazwash, Hormoz, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p408-411

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Uncertainties in the Prediction of Hurricane Windspeeds, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), with P. J. Vickery and M. B. Hardy, p706-715

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Tyagi, Avdhesh K.

Fate/Transport Modeling and Remediation of Contaminated Plume at Vance Airforce Base, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Sharon H. Carpenter, p287-292

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see Ravishankar, B. R., EE Mar./Apr. 94, p462-470

Tyler, Scott W.

see Chekuri, Vijay S., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1891-1896

Tzan, Shyh-Rong

Spacecraft Wall Design for Orbital Debris Impact, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with Chris P. Pantelides, p378-387

Tzourmakliotou, Dimitra

Explorations in Geodesic Forms, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p440-449

Uang, Chia-Ming

Deflection Amplification Factor for Seismic Design Provisions, with Ahmed Maarouf, ST Aug. 94, p2423-2436

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Uchikawa, Hiroshi

Advances in the Characterization of Cement Clinker, (Cement Manufacture and Use, Paul W. Brown, ed., 1994),

with Shunsuke Hanehara, p231-313

Estimation of the Thickness of Transition Zone in Concrete and Characteristics of Transition Zone in High-Strength Concrete, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L. Sarkar, ed., 1994), with Shunsuke Hanehara and Daisuke Sawaki, p619.

Management Strategy of Cement Industry in Technology Toward the Next Century, (Advances in Cement and Concrete, Michael W. Grutzeck, ed. and Shondeep L.

Sarkar, ed., 1994), p524-561

Uchrin, Christopher G. see Maldonato, Thomas J., EE May/June 94, p683-690

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Hygrothermal Effects in Composite Sandwich Panels, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with Jonathan D. Sherrill, p306-315

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see Okumura, Mikiya, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p1128-1137 Ugarte, Alfonso

Roughness Coefficient in Mountain Rivers, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Manuel Madrid, p652-656

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Final Storage of High Activity Waste in Spain, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Fernando Huertas and Jesús Alonso, p538-548

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see Benson, Allen, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p56-62

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Ulm, Franz-Josef

Recent Advances in 3D Non-Linear FE-Analysis of R/C and P/C Beam Structures, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Jean-Luc Clément and Johann Guggenberger, p1427-1432

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Mat Foundation Design: An Historical Perspective, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), p107-120

Umanets, M. P.

see Khrushchov, D. P., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2305-2309

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Use of An Analog Site Near Raymond, California, To Develop Equipment and Methods for Characterizing a Potential High-Level, Nuclear Waste Repository Site at Yucca Mountain, Nevada, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Arthur Geldon, Gary Patterson, James Gemmell, John Earle and Jon Darmell, p2413-2422.

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Implementation of Spent Fuel Storage Options - A Utility Project Engineers Perspective, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p370-374

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Joint Pond-Wetland System Performance in Colorado, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Bao Vang and Jay Carlson, p384-387

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Survey of Stormwater Detention State of Practice, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Jay Carlson and L. Scott Tucker, p873-876

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Bridge-Pier Location and Ice Conveyance in Curved Channels, with Joseph Schaefer and Robert Ettema, CR June 94, p66-72

Density-dependent Circulation in Desert-basin Aquifers with Isotropic Self-Similar Permeability Distributions, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Daoqiong Yang, p87-91

Ice Accumulation Rate and the Geometry of Ice Jams in River Bends, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with

Robert Ettema, p386-390
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V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1040-1044

see Son, Kwang-Ik, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1146-1150

Urzua, A.

see Wu, A. H., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p843-848

U.S. Army Corps of Engineers

Coastal Groins and Nearshore Breakwaters, 1994, 0-87262-998-8, 90pp.

US Army Corps of Engineers

Design, Construction, and Maintenance of Relief Wells, 1993, 0-87262-955-4, 90pp.

U.S. Army Corps of Engineers

Retaining and Flood Walls, 1994, 0-87262-968-6, 320pp. Roller-Compacted Concrete, 1994, 0-87262-999-6, 100pp.

U.S. Army Corps of Engineers, Department of the Army

Bearing Capacity of Soils, 1993, 0-87262-997-X, 145pp.

Usami, Tsutomu

Ductility of Concrete-Filled Steel Box Columns under Cyclic Loading, with Hanbin Ge, ST July 94, p2021-2040 Effective Width of Locally Buckled Plates in Compression

and Bending, ST May 93, p1358-1373 disc: O. K. Bedair and A. N. Sherbourne, ST Oct. 94, p3088-3091

ST Oct. 94, p3091-3093 clo:

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see Riley, Michael, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1517-1526

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Technologies for Planning Railroad Track Maintenance and Renewal, with Sue McNeil, TE Sept./Oct. 94, p807-820

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see Boswell, Stephen T., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and

see Meegoda, Jay N., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p904-911

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see Garcia, Luis A., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p291-294

Vaid, Y. P.

Liquefaction of Silty Soils, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), p1-16

Valdés, Juan B.

Long Term Predictability of River Stages under ENSO Influence, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Dara Entekhabi and Paolo Bartolini, p366-370

see Awwad, Haitham M., WR Sept./Oct. 94, p651-673 see Bartolini, Paolo, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry

N. Tuvel, ed., 1994), p97-101 see Bartolini, Paolo, (Water Policy and Management: Solv-ing the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p102-106

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A Practical Perspective on Liquefaction of Gravels, (Ground Failures Under Seismic Conditions, Shamsher Prakash, ed. and Panos Dakoulas, ed., 1994), with Michael L. Traubenik, John A. Egan and Jon Y. Kaneshiro, p241-257

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see Montefusco, L., (Modelling of Flood Propagation Over Initially Dry Areas, Paolo Molinaro, ed. and Luigi Natale, ed., 1994), p357-369

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Parametric Study of Axisymmetric Circular-Glass Plates, with Y. C. Das and Manjunatha Ramasamudra, ST May 94, p1663-1671

Vallejo, Luis E.

Application of Fracture Mechanics to Soils: An Overview, (Fracture Mechanics Applied to Geotechnical Engineer-Vallejo, ed. and Robert Y. Liang, ed., ing, Luis E. 1994), p1-20 Fracture Mechanics Applied to Geotechnical Engineering,

Geotechnical Special Publication No. 43, with Robert Y. Liang, ed., 1994, 0-7844-0056-3, 165pp.

The Role of Shale Pores in Settlement, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with Michael K. Robinson and Ann C. Stewart-Murphy, p1425-1434

disc. (of Effect of Gravel on Hydraulic Conductivity of Compacted Soil Liners, by Thomas L. Shelley and David E. Daniel, GT Jan. 93, p54-68) with Yun Zhou, GT May 94, p935-937

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see Reible, D. D., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1490-1496

see Thibodeaux, L. J., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1001-1007

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see Thibodeaux, Louis J., (Dredging '94, E. Clark McNair, Jr., ed., 1994), p588-595

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see Zadeh, Masoud M., (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), p223-

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Effects of Temperature and pH on Residual Aluminum in Alkaline-Treated Waters, with James N. Jensen and Md. A. Rahman, EE May/June 94, p543-559

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Tide- and Stormdriven Sediment Transport on the Inner-Shelf Along the Dutch Coast, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with Leo C. van Rijn, p822-836

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see Ligeringen, H., (Reconstruction of the West Breakwa-ter at Port Sines, Portugal, Rubble Mound Struc-tures Committee of the Waterway, Port, Coastal, and Ocean Division of ASCE, 1994), p99-123

van der Meer, Jentsje W. Stability and Wave Transmission at Low-Crested Rubble-Mound Structures, with Ivar F. R. Daemen, WW Jan./ Feb. 94, p1-19

Wave Runup on Smooth and Rock Slopes of Coastal Structures, with Cor-Jan M. Stam, WW Sept./Oct. 92, p534-550

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clo: WW Sept./Oct. 94, p513-514

van der Post, Kuno D.

Magnetic Tracing of Beach Sand: Preliminary Results, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with Frank Oldfield and George Voulgaris, p323-334

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Time-related Deflections of Cantilever Bridges, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Marcel van Vliet and Ane de Boer, p922-929

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disc. (of America's Pavements: World's Longest Bathtubs, by Harry R. Cedergren, CE Sept. 94, p56-58), CE Dec. 94, p27

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Permeability Measurements for the Modelling of Wave Action On and In Porous Structures, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p671-685

Van Haaften, David

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Limitations on Scientific Prediction and How They Could Affect Repository Licensing, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p285-291

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The Structuring of a New Architectural Landscape, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p956

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Effects of Gravity Currents in Circular Secondary Clarifiers, with C. Kranenburg, EE July/Aug. 94, p943-

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Turbidity and Contaminant Release During Dredging of Contaminated Sediments, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with Peter Vroege, p210-219

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see Hoekstra, P., (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p402-416

van Vledder, Gerbrant

Case Studies of Extreme Wave Analysis: A Comparative Analysis, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), with Yoshimi Goda, Peter Hawkes, Etienne Mansard, Maria Jesus Martin, Martin Mathiesen, Eric Peltier and Edward Thompson, p978-992

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disc. (of Hot Spot Stresses of Tubular Joints Subjected to Combined Loadings, by Ai-Kah Soh and Chee-Kiong Soh, ST Feb. 93, p654-661) with Jeffrey A. Packer and Jaap Wardenier, ST July 94, p2257-2259

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Practical Seepage Control in Existing Tunnels, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Daniel J. Hurst and C. T. Goewey, p888-895

Vandergraaf, Tjalle T.

Migration of Conservative and Poorly Sorbing Tracers in Granite Fractures, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Chung-Kyun Park and Douglas J. Drew, p2251-2256

VanderLoop, S. L.

Biodegradation of 2,4-Dinitrotoluene in a Two Stage System, (Critical Issues in Water and Wastewater ment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with M. T. Suidan, M. A. Moteleb and S. W. Maloney, p710-717

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Czech Program of Underground Repository for ILW and HLW Radioactive Wastes, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2310-2314

Vanegas, Jorge A.

Multimedia in Civil Engineering, with Nelson C. Baker,

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Multimedia Technologies for Civil and Construction Engineering Professional Practice, (Computing in Civil Engi-neering, Khalil Khozeimeh, ed., 1994), with Gary Smith, p592-599

Strengthening the Design/Construction Interface Using Electronic Imaging, Document Management and Work Flow Technologies, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p600-607

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see Huang, Rong-Yau, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1-8

see Reyna, Santiago M., (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p55-72

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Standards Processing 2000, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with J. Russell Thomas and Jamie L. Worling, p137-144

Vaniman, David T.

Inferences of Paleoenvironment From Petrographic, Chemical and Stable-Isotope Studies of Calcretes and Fracture Calcites, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Joseph F. Whelan, p2730-2737

see Roedder, Edwin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program

Committee, 1994), p1854-1860

see Whelan, Joseph F., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2738-2745

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see Dharwadkar, Parmanand V., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p759-766

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Mapping Fractures Using Fresnel Volume Tomography, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with John E. Peterson, Jr. and E. L. Majer, p2648-2654

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Demand-Driven Operation of Reservoirs Using Uncertainty-Based Optimal Operating Policies, with Mohammad Karamouz, WR Jan./Feb. 94, p101-114 err: WR July/Aug. 94, p57

Vasireddy, Satya

Sedimentation and Remediation Aspects of Recreation Lakes, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Ashok Medhi and Anand Prakash, p1136-1140

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see Motro, René, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p704-713

Vasu, Avtar S.

see Ariemma, Franco, (Predicted and Measured Behavior of Five Spread Footings on Sand, Jean-Louis Briaud, ed. and Robert M. Gibbens, ed., 1994),

Vaugh, Samuel K.

Historical and Enhanced Edwards Aquifer Recharge. (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Kelly J. Kaatz and Kenneth L. Choffel, p380-383

see Payne, Kelly D., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p774-777

Vaughn, David

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Design of a Network and Travel Simulator: A Tool Box for the Analysis of Route Choice Behavior in the Presence of Information, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Prasuna Reddy, Ryuichi Kitamura, Paul P. Jovanis and Mohamed A. Abdel-Aty, p1743-1750

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Hurricane Andrew and the Central and Southern Florida Project, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), with Christopher T. Smith, p597-606

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Chloride Extraction and Re-Alkalization of Reinforced Concrete Stops Steel Corrosion, (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), with Sten K. Henriksen and Richard Hauer, p1127-1134

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Demonstration of the Wes New York Bight Hydrodynamic effortstation of new Wes New York Dight nythodynamic Model in Long Island Sound, (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swanson, ed., 1994), with Norman W. Scheffner, p309-322

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Port of Tacoma Milwaukee Waterway Nearshore Fill Design, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with Doug Saathoff and Garry E. Horvitz, p1388-1399

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Evaluation of Remedial Options for the Sitcum Waterway Sediments: A Case Study, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with Garry E. Horvitz and Richard C. Gilmur, p555-566

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Dredging Desk Reference: Accomplishments and Future Developments, (Dredging '94, E. Clark McNair, Jr., ed., 170, 179 1994), with Lyle J. Maciejewski, p170-179

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Comparison of Bridge Deterioration Rates, Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed.,

1994), with Carl R. Beidleman, p296-301 Portfolio Approach to Strategic Management of A/E Firms, ME Sept./Oct. 94, p41-47

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Denitrification Inhibition by High Nitrate Wastes, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with J. Silverstein, N. E. Cook, Jr., L. A. Figueroa, R. Hund and G. D. Lehmkuhl, p415-422

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Flurricane Windspeeds at Inland Locations, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with L. A. Twisdale, p473-478

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Predicting Wave Spectra With a Third Generation Spectral Wave Model, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), with Robert E. Jensen, Ph.D. and Hans C. Graber, Ph.D., p420-432

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Fracture Behavior of Cement Grouted Sand, (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), with A. Ata and S. Mebarkia, p147-159

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The Normandie Bridge, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p660-665

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1993 Ground-Water Flooding in the Havana Area, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p608-612

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Public Involvement and Participation: Planning Imperatives for the Coming Century, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p859-863

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The Application of Streamflow Duration Curves in Water Resources Engineering, (Water Policy and Manage-ment: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Neil M. Fennessey, p201-204

Flow-Duration Curves I: New Interpretation and Confidence Intervals, with Neil M. Fennessey, WR

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Hydrodiplomacy on Forester Creek, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p557-560

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Site Characterisation and Performance Assessment in the Swiss Nuclear Waste Disposal Programme: Benefits from the Second NAGRA/USDOE Project Agreement, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with P. Zuidema and P. Blümling, p2616-2623

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BPA Realtime Hydrologic Forecasting System for the Columbia River Basin, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with L. E. Brazil and K. Jawed, p5-8

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Computer Use QA Documentation for Compliance with ISO-9000, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1812-1815

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Bias in Regression Estimates of Manning's n, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p727-731

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Evaluating Activated Sludge Secondary Clarifier Performance: A Protocol, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Marie Edwards, ed., 1994), with M. Augustus, D. T. Chapman, C. Chen, J. K. Esler, T. M. Keinath, D. S. Parker, R. J. Tekippe and T. E. Wilson, p209-216

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Principal Components Time Spectra of Suspended Sediment in Random Waves, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with Keith W. Bedford and Sean T. O'Neil, p296-305

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Multi-Barrier Waste Package Fabrication and Closure Development, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p955-962

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Risk-Based Budgeting for Maintenance Dredging, (Risk-Based Decision Making in Water Resources VI, Yacov Y. Haimes, ed., David A. Moser, ed. and Eugene L. Stakhiv, ed., 1994), with David A. Moser, p234-242

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Buoy Directional Wave Measurements Using Magnetic Field Components, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), with C. C. Teng and R. Ladner, p316-329

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Coastal and Oceanographic Impact of Hurricane Andrew, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), with Lihwa Lin, p791-798

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Modeling of Biofiltration of Natural Organic Matter in Drinking Water Treatment, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with R. Scott Summers, p452-459

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3D Free Surface Flow Model Verification - A Panel Discussion on Test Cases, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed.,

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Flow and Sediment Transport at River Diversions, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Brian Barkdoll and A. Jacob Odgaard, p1060-1064

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Detailed Characterization and Preliminary Adsorption Model for Materials for an Intermediate-Scale Reactive-Transport Experiment, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Charles R. Bryan and Malcolm D. Siegel, p2048-2062

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The Future of the Past: Historic Preservation at the Metropolitan Washington Airports, (Aviation Crossroads: Challenges in a Changing World, William J. Sproule, ed., 1994), p8-17

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see Lundstrom, Scott C., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2121-2130

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Intelligent Construction Planning, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with O. Shaked, p972-979

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Robot for Interior-Finishing Works in Building: Feasibility Analysis, with Yechiel Rosenfeld, CO Mar. 94, p132-

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(Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), with George J. Tupac, p226-238

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Overview of Space Environmental Effects, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p628-637

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WEIGUM

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Cultivating Stakeholder Interaction in Emergency Management, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Loretta F. Brownell, p188-192

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Navigation Channel Design Using Real-Time Marine Simulator, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1081-1090

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In Situ Treatment of VOCs by Recirculation Technologies, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with R. L. Siegrist, M. R. Ally, W. E. Sanford, P. M. Kearl and J. L. Zutman, p572-579

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Civil Engineering and Civic Monuments: The Commissioning, Design and Public Perception of Urban Infrastructure Projects, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1244-1249

Technological Advance in Japanese Building Design and Construction, 1994, 0-87262-932-5, 107pp.

Wedge, Rodney F.

Improving the Pipeline Hydrostatic Leak Test Model, (Hydraulics of Pipelines, Deon T. Fowles, ed. and Douglas H. Wegener, ed., 1994), p182-205

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Civilian Structures: Taking the Defensive, CE Nov. 94, p48-50

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Dredged Material Disposal and Migratory Birds, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1380-1387

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Remote Sensing Pipeline Rehabilitation Methodologies Based Upon the Utilization of Infrared Thermography, (Urban Drainage Rehabilitation Programs and Techniques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), with Richard J. Graf and Leann M. Forister, p173-181

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How Can a Radioactive Waste Disposal Facility Achieve Compliance with RCRA?, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1525-1531

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Engineers and Leadership: How to Move up "Economic Food Chain", El Jan. 94, p50-57

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Evaluation of Cast Iron Columns for Safety and Reliability, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with William Lamartina and Mark Tamaro, p1544-1549

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Flow and Chloride Transport in the Tidal Hudson River, NY, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Raymond W. Schaffranek and M. Peter de Vries, p1300-1305

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A Mobile Robot for Reconnaissance of HAZMAT Incident Sites, (Robotics for Challenging Environments, Laura A. Demsetz, ed. and Paul R. Klarer, ed., 1994), p269-277

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Unexploded Ordnance (UXO) and Dredging, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with James Clausner, Raymond Pilon, Joan Pope and Richard Lewis,

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Spectral and Parametric Wave Models of Lake Erie, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Keith W. Bedford, p217-221

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The Nature of Structural Morphology and Some Interdisciplinary Examples, (Spatial, Lattice and Tension Struc-tures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), p1000-1009

Westerhoff, P.

Nation-Wide Bromide Occurrence and Bromate Formation Potential in Drinking Water Supplies, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with M. Siddiqui, J. Debroux, W. Zhai, K. Ozekin and G. Amy, p670-677

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See Grenier, R. R., (Estuarine and Coastal Modeling III, Malcolm L. Spaulding, ed., Keith Bedford, ed., Alan Blumberg, ed., Ralph Cheng, ed. and Craig Swan-son, ed., 1994), p58-70

Westerman, Harold C., see Cowdell, Stanley R., (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p114-123

SDC Detector Foundation Requirements for the SSC, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with M. W. Butalla, H. James Krebs and Gary W. Tulk, p767-772

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Wetzel, John P.

Space Station Microgravity Analysis and Assessment, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p463-472

Weyers, R. E.

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Wheatley, Nancy J.
The Regulatory Pendulum: Has it Finally Come to Rest for CSO Control?, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p187-197

Wheeler, D. R.

Where is the Pendulum Now? Do We Really Know?, (National Water Resources Regulation: Where is the Envi-ronmental Pendulum Now?. Howard Holme, ed., 1994), p155-167

Wheeler, S. J.

see Duffy, S. M., GT May 94, p781-796

Whelan, Joseph F.

Paleoclimatic and Paleohydrologic Records From Secondary Calcite: Yucca Mountain, Nevada, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with David T. Vaniman, John S. Stuckless and Richard J. Moscati, p2738-

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see Roedder, Edwin, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1854-1860

see Sharpe, Saxon E., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2538-2544

see Vaniman, David T., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2730-2737

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Whiffen, G. J.

see Shoemaker, C. A., (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p189-192

Whipple, William, Jr.

Drawing Conclusions as to Environmental Regulation, (National Water Resources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), with Harlan Agnew, Michael L. Clar, Robert Fiehweg, Tad Foster, Howard Holme, Marshall Jennings, Jonathan Jones, Joan Lee, Jan Rosholt, Charles Sain, Kyle Schilling, Earl Shaver and Don Woodward, p258-

Regulation of Nonpoint Sources, (National Water Re-sources Regulation: Where is the Environmental Pendulum Now?, Howard Holme, ed., 1994), p198-203

disc. (of Drought and Water-Supply Management: Roles and Responsibilities, by Neil S. Grigg and Evan C. Vlachos, WR Sept./Oct. 93, p531-541) with William J. Werick, WR Nov./Dec. 94, p1003-1004

Whitaker, William

Teaching Soil Mechanics Laboratories with Computer Assistance, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1280-1285

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see Liew, J. Y. Richard, ST May 94, p1434-1454 see Sotelino, E. D., (Analysis and Computation, Franklin

Y. Cheng, ed., 1994), p193-202

White, David G. Conceptualization of Boat Access Development Zones, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p605-614

White, G. J. see Nikolaidis, E., (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p1466-1471

White, Richard N.

see Mosalam, Khalid M., (Analysis and Computation, Franklin Y. Cheng, ed., 1994), p57-66

White, Thomas D.

see Haddock, John E., (Infrastructure: New Materials and Methods of Repair, Kim D. Basham, ed., 1994), p788-795

White-Tail Feather, W. A.

Monitored Retrievable Storage: A Test of Cultural Values and A Symbol of Tribal Sovereignty, (High Level Radio-active Waste Management, High Level Radioactive Waste Program Committee, 1994), p68-75

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see Zuppero, Anthony, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p532-541

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see Paces, J. B., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2391-2401

Whittaker, Andrew S.

Implementation of Passive Energy Dissipation Systems in the United States, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Ian D. Aiken, p1280-1285

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Whittle, Andrew J.

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GT Oct. 94, p1911-1912

Formulation of MIT-E3 Constitutive Model for Overconsolidated Clays, with Michael J. Kavvadas, GT Jan. 94,

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Holy Seah, GT Jan. 94, p199-224
Ho Seah, GT Jan. 94, p199-224
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Wholly, Thomas F.

Transportation Planning and Air Quality II, 1994, 0-87262-914-7, 237pp.

In-Situ Treatment of Hazardous Sediment, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with Stacy McAnulty, Robert Stanforth, Ajit Chowdhury and Mick Warner, p468-473

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Safety Assessment of a Chemical Reactor Vessel, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with A. Longinow and F. Calabrese, p1-6

Wiegand, Nancy K.

Comparing Two OODBMSs: An Application Developer's Perspective, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Teresa M. Adams, p1412-1418

Wiegel, Robert L.

Opening Remarks by Robert L. Wiegel, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p194-197

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Living in Space, (Engineering, Construction, and Opera-tions in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), p842-845

Wigand, Peter E.

Late Holocene Climate Derived From Vegetation History and Plant Cellulose Stable Isotope Records From the Great Basin of Western North America, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Martha L. Hemphill and Sikha (Manna) Patra, p2574-2583

Wijnberg, Kathelijne M.

Three-Dimensional Behaviour of a Multiple Bar System, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with Felix C. J. Wolf, p59-73

Wikström, Ragnar

disc. (of Wave Equation Parameters from Driven-Rod Test, by Robert Y. Liang and Yuanjing Sheng, GT June 93, p1037-1057) with Bo Berglars, GT Oct. 94, p1914-1915

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Biotransformation of Pesticides in Simulated Groundwater Columns, (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), with Stuart R. Garrett, p368-375

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see Rees, Susan Ivester, (Dredging '94, E. Clark McNair, Jr., ed., 1994), p1481-1489

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Wilcock, Peter R.

Estimating Local Bed Shear Stress in Large Gravel-Bed Rivers, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Alan F. Barta and Conor C. C. Shea, p834-838

see Barta, Alan F., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994),

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Wild, James E.

see DeSantis, Philip V., (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p454-461

Wildbore, Phil

Sewerage Rehabilitation Verified Simulation Modeling, (Urban Drainage Rehabilitation Programs and Tech-niques, Task Committee on Urban Water Infrastructure Failure Diagnostics and Remedial Measures and Task Committee on Urban Drainage Rehabilitation Programs and Techniques, ASCE, 1994), p73-83

Wilder, D. G.

see Lin, W., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1938-1945

Wilder, Dale G.

Engineered Barrier Environment, Yucca Mountain, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1179-1187

see Paces, J. B., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2391-2401

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Wiley, Mary

see Murray, Peggy, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), p1285-1294

Wiley, Mary Baker

Dredged Material Accumulation at a Dispersive Disposal Site, (*Dredging '94*, E. Clark McNair, Jr., ed., 1994), with Drew Carey, Thomas J. Fredette and W. F. Bohlen, p1172-1181

Wilhelms, Steven C.

see Gulliver, John S., (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), p1331-1340

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Using GIS to Develop 2-D Hydraulic Models, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Lynn E. Johnson and Joel Herr, p136-140

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see Voulgaris, George, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p894-909

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Williams, Carol

see Wiltshire, Susan, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p275-279

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see Morris, Peter H., (Fracture Mechanics Applied to Geotechnical Engineering, Luis E. Vallejo, ed. and Robert Y. Liang, ed., 1994), p40-53

Williams, David T.

Use of HEC-2 and HEC-6 to Determine Levee Heights and Revetment Toe Scour Depths, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with David Cozakos, p1075-1079

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Comparison of Two Eductors for Sand Bypassing, (Dredging '94, E. Clark McNair, Jr., ed., 1994), with James E. Clausner, p875-884

Wave Attenuation at the Mobile Stable Berm, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), with Cheryl Burke Pollock, p339-351

see Gaffney, Douglas A., (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), p905-917

Williams, J. J.

see O'Connor, B. A., (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p879-893

Williams, Jeffrey R.

Kumar, Prasanna N., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1365-1371

Stakeholder Involvement in the Evaluation of a Multipurpose Canister System, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with Dan Kane and Thomas B. Smith, Jr., p182-187

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od Control vs. Flood Management, CE May 94, p31-54 disc: A. John Macchi, CE Aug. 94, p33 disc: Ebene.zer Lonasco, CE Nov. 94, p29 disc: James T. Lovelace, Billy R. Arthur, Donald M. Coleman, David Busse, Jules D. Bartels, Claude N. Strauser, Stephen L. Redington, Raymond J. Kopsky, Jr. and Robert J. Rapp, CE Dec. 94, p27-28

Williams, R.

Computer Analysis of Lateral Loading in Wood-Framed Structures, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), p1513-1515

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Williams, R. F.

A Health Risk Based Approach for HLW Repository Environmental Protection Criteria, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with R. L. Yang, R. McGuire and R. E. Wilems, p1435-1450

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Convergence Rates of the Method of Successive Elastic Solutions in Thermoplastic Problems of a Layered Concentric Cylinder, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with Marek-Jerzy Pindera, p348-

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Repository Program Licensing Approach, (High Level Ra-dioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with April VanCamp Gil, p1585-1592

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Wilson-Fahmy, Ragui F. Experimental Behavior of Polymeric Geogrids in Pullout, with Robert M. Koerner and Leonard J. Sansone, GT Apr. 94, p661-677

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Compaction Grouting Stops Settlement of an Operating Water Treatment Plant, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with F. Barry Newman, Kenneth B. Andromalos and Chris R. Ryan, p!!76-1192

Settlement of a 15-Meter Deep Fill Below a Building, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with Samuel G. Mazzella and F. Barry Newman, p398-416

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see Schumm, Stanley A., ed., The Variability of Large Alluvial Rivers

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Object-oriented Model of Colorado River Salinity, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Steven C. Chapra, p392-395

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Evaluation of the Water Supply Potential of the Floridian Aquifer in Seminole County, Florida, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), with Robert P. Schreiber, Ricardo Diaz and Charles J. Voss, p600-603

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Implementation and Validation of a Global Third-Generation Wave Model at Fleet Numerical Oceanography Center, (Ocean Wave Measurement and Analysis, Orville T. Magoon, ed. and J. Michael Hemsley, ed., 1994), with R. Michael Clancy, p406-419

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Thermal Performance of a Depleted Uranium Shielded Storage, Transportation, and Disposal Package, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), with H. R. Yoshimura, p877-881

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The Response of a Barred Coast to a Sequence of Storms, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), p44-58

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Large Scale Measurements of Near Surface Orbital Velocities in Laboratory Waves by Using a Surface Following Device, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with Karl F. Daemrich, p770-784

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Hurricane Andrew Induced Damage to Florida Power & Light's Transmission System, (Hurricanes of 1992: Lessons Learned and Implications for the Future, Ronald A. Cook, ed. and Mehrdad Sotani, ed., 1994), 387-396

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Seismic Response of Concrete Tilt-Up Systems, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), with Neil M. Hawkins, p1484-1489

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Working Group on the Stiffness of Concrete Shear Wall Structures, Structural Division, ASCE, (R.C. Murray, chmn.)

Stiffness of Low Rise Reinforced Concrete Shear Walls, 1994, 0-7844-0060-1, 196pp.

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Steep Constructed Stream Channels and Chutes, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with F. Robert McGregor and Gary Lacy, p657-661

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Inner Continental Shelf Transport Processes: The Middle Atlantic Bight, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with O. S. Madsen, T. A. Chisholm and J. P. Xu, p867-878

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Waterfront Renaissance Racine, Wisconsin, (Marinas, Parks and Recreation Developments, Marshall Flug, ed. and Fred A. Klancnik, ed., 1994), p544-551

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A User Friendly Microcomputer Program for Liquefaction Potential Analysis, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with J. S. Hsu and A. Urzua, p843-848

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Small Scale Dynamic Structures and Their Sedimentation Effects in Estuarine Environment, (Coastal Dynamics '94, A. S.-Arcilla, ed., Steve J. F. Marcel, ed. and Nicholas C. Kraus, ed., 1994), with Jiaxue Wu, p158-174

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Combination of an Automated Channel Network Extracting System and a Distributed Watershed Model in Estimation Rainfall-Runoff Processes, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Yi-Shao Lai and Cheng-Hsung Liu, p356-360

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Integration of Water Rights and Salinity Considerations in Comprehensive River Basin Management, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p396-399

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Demand/Supply Relationship in Transportation Network Design Problems: A Genetic Algorithm Approach, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Jerry B. Schneider, p938-941

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The Impacts of Roughness Bars on the Mixing Processes, (Hydraulic Engineering '94, George V. Cotroneo, ed. and Ralph R. Rumer, ed., 1994), with Hsieh Wei Shen, p533-537

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see Khrushchov, D. P., (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p2305-2309

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Displacement of Batter Piles in Layered Soil, (Vertical and Horizontal Deformations of Foundations and Embankments, Albert T. Yeung, ed. and Guy Y. Félio, ed., 1994), with G. G. Meyerhof, p975-985

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Elasto-Plastic Buckling Design for Shallow Cylindrical Shells under External Pressure, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with James G. A. Croll, p936-945

Nonlinear Buckling Response of Single Layer Latticed Barrel Vaults, (Spatial, Lattice and Tension Structures, John F. Abel, ed., John W. Leonard, ed. and Celina U. Penalba, ed., 1994), with Takashi Taguchi, p519-528

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A Conceptual Study of A Solar Power Satellite Using Centrifugal Force, (Engineering, Construction, and Operations in Space IV, Rodney G. Galloway, ed. and Stanley Lokaj, ed., 1994), with Hiroshi Kanamori, Kenji Nozaki, Takeo Oura, Takanori Sato, Hisahito Tadokoro, Kenji Takagi, Hiroshi Ueno, Koji Oishi, Haruyuki Namba and Shinji Matsumoto, p57-63

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Construction Process Innovation Through SMART System, (Computing in Civil Engineering, Khalil Khozeimeh, ed., 1994), with Junichiro Maeda, p1583-1590

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Soil Mix Walls in Difficult Ground, (In-Situ Deep Soil Improvement, Kyle M. Rollins, ed., 1994), with Shigeru Takeshima, p106-120 see Nagata, Satoshi, (Water Policy and Management: Solving the Problems, Darrell G. Fontane, ed. and Harry N. Tuvel, ed., 1994), p437-440

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Qualification System for Building Engineers in Japan, (Structures Congress XII, N. C. Baker, ed. and Barry J. Loodno, ed., 1994), p211-214

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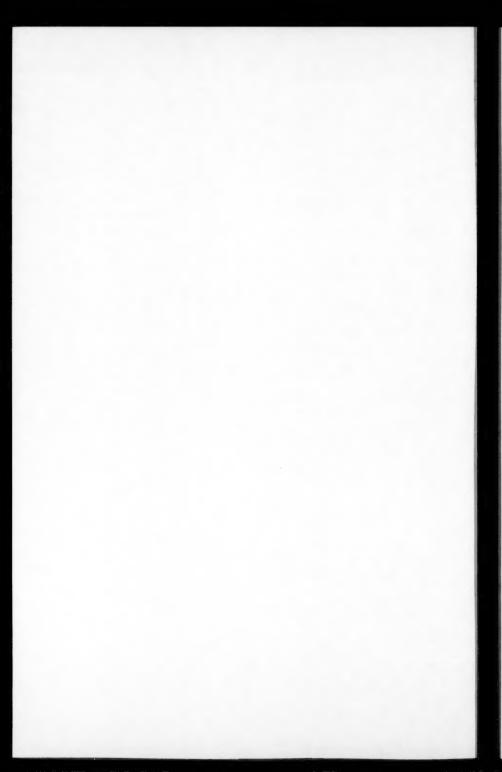
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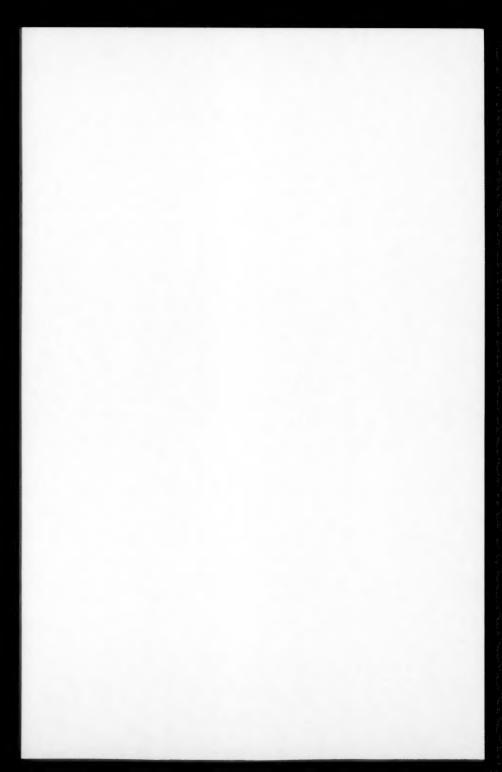
Swiss Guideline: Protection Objectives for the Disposal of Radioactive Waste, (High Level Radioactive Waste Management, High Level Radioactive Waste Program Committee, 1994), p1429-1434

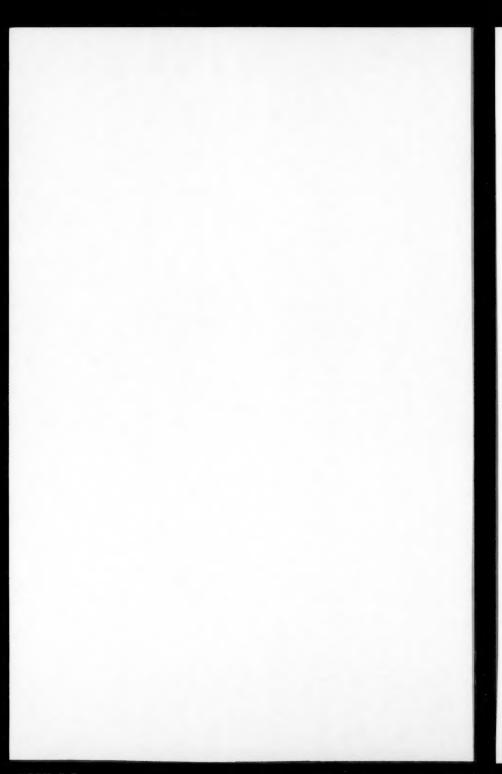
Zutman, J. L. see Webb, O. F., (Critical Issues in Water and Wastewater Treatment, Joseph N. Ryan, ed. and Mare Edwards, ed., 1994), p572-579

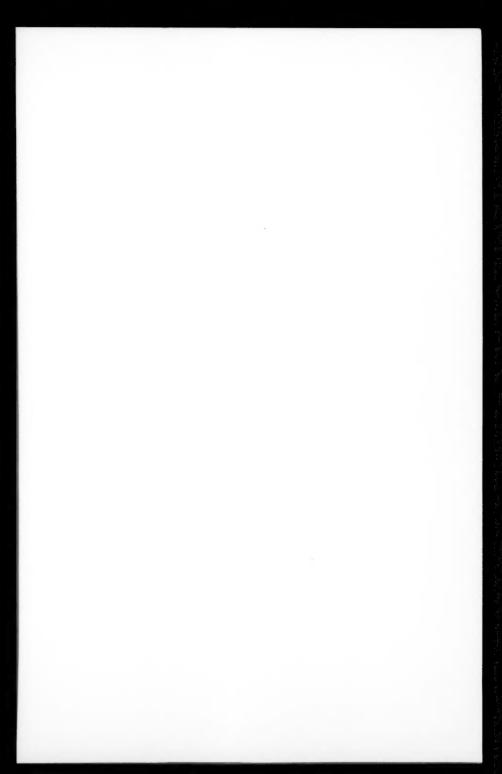
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